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THE RÔLE OF DREAMS IN ETIOLOGY *

F. X. DERCUM, M.D.
PHILADELPHIA

Interest in the subject of dreams has been especially stimulated since Freud enunciated his theory. As is well known, Freud claims to be able to unravel dreams by his so-called analytic method, and he further regards dreams as directly concerned in the production of various hysterical symptoms, phobias, obsessions and delusions. In his brochure "Ueber dem Traum," and in his book "Die Traumdeuting," he tells us that he reached new conclusions with regard to dreams when he applied to them the same method of psychologic research which he had previously applied to the solution of various morbid phenomena. It becomes necessary, therefore, in order that we may have clear conceptions, to briefly review the origin and nature of his method.

Psycho-analysis, as is well known, began with Breuer's case of hysteria. Breuer and Freud stated that they found that the individual symptoms of hysteria immediately and permanently disappeared whenever they were successful in fully arousing in the patient the memory of the event which was causal to the development of the symptoms, together with the accompanying emotion, if, added to this, the patient gave the fullest possible description of this event and gave verbal expression to the emotion. Originally this method presupposed that the patient was capable of being hypnotized and was based on the expansion of consciousness which was supposed to ensue under hypnosis. Subsequently formal hypnosis was dispensed with. Freud's endeavor was to set aside the patient's symptoms, and he attained this end in so far as he placed the patient back into the psychic state in which the symptoms first made their appearance. There appeared under these circumstances memories, thoughts and impulses which had long disappeared from his normal consciousness. When the patient communicated these, his "soul happenings," to his physician, and did so with intense emotional reaction, the symptom was conquered and its recurrence prevented. This result Breuer and Freud explained as follows: The symptom had existed as a substitute or in place of another past experience which had been suppressed (*verdrängt*), and the recollection of which had become subconscious—that is, it was a conversion of the original memory of an act and its associated emotion into a pathologic symptom or obsession. The therapeutic efficacy of their procedure Breuer and Freud explained as the catharsis of the repressed, "locked-up" emotion which had been attached to or associated with the suppressed psychic experience. Freud asserts that his method, or the "cathartic method" as it has also been termed, is, in contrast to all other methods of psychotherapy, characterized by the fact that its therapeutic efficacy is not due to suggestion, a statement which the facts attested by Freud himself lead us frankly to question. I need hardly detail the method which Freud employs. Briefly it is as follows: The patient lies on her back on a couch, while he himself sits on a chair back of her and out of her line of vision. He no longer requests the patient to close her eyes as he did in his earlier method and avoids every touch or procedure such as would be in keeping with hypnosis. Such a séance, he informs us, has the character of a conversation between two persons equally awake, one of whom, the patient, is spared every possible muscular effort and every diverting sensory impression such as might disturb her in her concentration on her internal psychic processes.

In order to take advantage of these involuntary ideas or conceptions of the patient, Freud requests the latter to allow herself to drift in her communication, just as one would drift in a conversation in which one passes in turn to the most varied subjects. He enjoins on the patient, before she enters into the detailed account of her history, to tell everything that comes into her head, whether she thinks it important or unimportant, whether it seems relevant or senseless. The patient is especially requested not to suppress any thought or idea because this idea happens to be shameful or painful.

It is with this procedure as applied to dreams that we are in this paper concerned. The essential facts of a dream having been noted in writing or in an oral statement, as the case may be, the individual is to communicate every idea without exception that occurs to her in connection with the dream. Ordinarily a person thinking about a dream will reject this or that idea suggested by the dream as unimportant and as having no connection with the dream. It is this judgment or critique, as Freud calls it, which under ordinary circumstances causes the patient to reject certain ideas from the communication; but if the patient can withhold all judgment or critique in regard to the ideas which present themselves in thinking over the substance of a dream, a psychic material is furnished which leads to the solution or unraveling of the dream. The essential facts of the dream, that is the dream as it is remembered, Freud calls "the manifest dream content"—(*den manifesten Trauminhalt*). The material derived from the dream, i. e., from the unrestrained association of ideas ensuing on a giving up of one's self to dwelling on the dream, Freud calls the "latent dream content." The psychic process by means of which the latent dream content is revealed, he calls the "dream work" or *Traumarbeit*. The opposite psychic process he calls the "analysis work" or *Analysenarbeit*.

* Read before the Philadelphia Neurological Society, Feb. 24, 1911.

Further, Freud says that when one compares the number of ideas contained in a dream, as written down from memory, with the number of ideas to which the analysis leads, the dream work reveals that a very great condensation, or *Verdichtung,* as he calls it, has taken place in the dream. It is difficult to form an adequate idea of this condensation. It becomes more apparent the deeper the dream analysis penetrates. We do not find a single factor of the dream content from which threads of association do not lead into three or more different channels; there is no situation which is not pieced together out of three or four impressions and experiences; in other words, Freud evidently regards the dream content as a compound of a number of psychic elements. He compares it to the composite family photographs of Galton. The dream work brings the various apparently superimposed dream components to light. The common factors of the dream content become more prominent, while conflicting details disappear. This explains in part the varying prominence or peculiar indistinctness of so many elements. Where common factors or common elements between the dream thoughts are not present, the dream work endeavors to evolve such in order to make a common presentation of the dream possible. The simplest way to bring thoughts which have nothing in common nearer to each other, consists in the change of the verbal expression for one of them by means of which the other by a corresponding transformation may approach nearer. It is a process similar to that of making rhymes in which the similarity of sound supplies the common element.

Freud believes that through the process of condensation of the dream, we find an explanation of certain features of its content which are peculiar to it alone and are not found in conceptions formed in the waking state. These are the collective and mixed conceptions of persons and the strange mixed pictures, creations and animal compositions, comparable to those of oriental phantasy. In dream compositions they are formed with inexhaustible richness. Every element of the dream content is through the material of the dream thoughts, as Freud puts it, overdetermined, and traces its origin, not to a single element of a dream-thought, but to a whole series of such thoughts. The latter do not stand close to each other, but are of the most varied origins in the thought fabric. The dream element is, in the right sense, the representation in the dream content of all this disparate material.

The analysis reveals, however, another side of the relation between dream content and dream thoughts. Just as from every dream element connections lead to a number of dream thoughts, so, as a rule, a dream thought is represented by more than one dream element. The association paths converge not simply from the dream thoughts to the dream content, but intersect and interweave many times on the way. In complicated and confused dreams, the impression of dissimilarity between dream-content and dream-thought cannot be entirely ascribed to condensation and to dramatization. There is evidence of the working of a third factor. Freud notes that when he, by means of his analysis, arrives at a knowledge of the dream-thoughts, the manifest dream-content deals with entirely different material from that of the latent dream content. This, however, is merely an appearance which vanishes on closer examination, for Freud finds that all of the dream-content is carried out in the dream-thoughts and that almost all of the dream-thoughts are represented by the dream-content. However, there is still a difference remaining. That which in the dream was clearly and plainly marked as the essential content, must be relegated to a very subordinate rôle among the dream-thoughts, and that which among the dream-thoughts has the claim to greatest attention is the representation of material which is found either not at all in the dream content or is only represented there by a very remote allusion in an uncertain region of the dream. Freud expresses this idea as follows: During the dream work the psychic energy passes from the thoughts and conceptions to which it by right belongs, to others, which, in his judgment, have no claim to such an emphasis or importance, and it is this process which has to do with the concealment of the meaning of the dream and with making the connection between dream-content and dream-thought unintelligible. This process, to which Freud ascribes great importance, he terms "dream-displacement" or *Traumverschiebung.* It would seem that that which is most vivid in the dream-content would be the most important, but according to Freud's theory, it is precisely in an obscure dream element that he finds the direct evidence of the most important dream thoughts.

Displacement plays a very varying rôle. There are dreams in which no displacement takes place; these are clear and intelligible dreams, like the dreams of an unveiled or unconcealed desire. In other dreams, again, not a single particle of the dream thought retains its proper psychic value. Everything important in the dream-thoughts is replaced by secondary matter. A most complete series of transitions can be recognized. The darker and more confused a dream, the more we may count on the factor of displacement. Again, when instead of the original elements—instead of the really pertinent material—indifferent material finds a place in the dream-content, we have merely to do with an act of displacement.

Further, the dream-work, or *Traumarbeit,* fashions the preformed dream-content into a dream-composition. The dream acquires a kind of façade which covers almost all, but not all, of its parts. In this portion of the dream-work, motives become apparent, motives which have their origin in a regard for the comprehensibility of the dream.

The kernel of the problem, says Freud, lies in the displacement. The essential condition of the displacement is a purely psychologic one. It is of the nature of a play of motives or activation of motives. We ascertain the cause of this activation of motives when we realize that we are compelled to break off in communicating the contents of a dream because thoughts present themselves which cannot be revealed—cannot be spoken of to others—without the injury of most important considerations, personal and private. Freud asserts that this is true of the content of every dream; that every dream contains thoughts which necessitate privacy. If, Freud says, he pursues the dream-thoughts for himself, he arrives finally at thoughts which surprise him, which he did not know existed in him, and which not only appear strange to him, but are also unpleasant and which he, for this reason, would energetically resist. Freud says that he cannot do otherwise than to suppose that these thoughts are really present in his soul-life (his subconsciousness?), and possess a certain psychic intensity or energy, but because they had been in a peculiar psychologic situation, they could not become known to him, i. e., could not reach his consciousness. He terms this condition *Verdrängung,* suppression. He says he cannot refrain from concluding that between the obscurity of the dream content and the condition of suppression,

there is a causal relationship, and he concludes that the dreams had to be obscure in order that the tabooed dream-thoughts should not reveal themselves. The misrepresentation of the dream serves to conceal the latter.

Freud believes that the dream-work, *Traumarbeit,* is one of a series of psychic processes to which the origin of hysterical symptoms, phobias, obsessions and delusions are to be ascribed. Condensation and specially displacement are characters never wanting in the other processes as well. Freud believes that a whole train of phenomena of the every-day life of normal individuals, forgetfulness, unconscious mistakes in speech, in simple acts and other errors, are due to analogous psychic mechanisms.

Freud's therapeutic application of the dream consists in having the patient submit himself to the procedure already outlined, i. e., of allowing all of the thoughts suggested by the dream, no matter what their character, to find verbal expression, and, just as in his method of psycho-analysis, the suppressed, painful or shameful thought thus finds a vent. Freud assumes that even in the deepest sleep a certain degree of psychic activity is present which manifests itself as a watchfulness or guardianship over the sleeper. This guardian-like attention or watchfulness concerns itself among other things with a suppressed desire and forms with the latter the dream, the dream being a compromise of this guardian-like attention and the suppressed desire. Thus is produced a kind of psychic relief for the suppressed desire, for the dream represents the desire as fulfilled.

It is to be noted that the feature of Freud's conception of the dream is, first, its personal, intimate nature, dealing with a subject of such a character that the latter cannot be discussed without injury to the dreamer, without lesion of the proprieties, and second, that the dream always deals with a desire. Freud divides dreams as follows: first, those which consist of an unveiled, undisguised realization of an unsuppressed desire; second, those which consist of the realization of a veiled desire latent and suppressed; and third, those which consist of the realization of a suppressed desire, little or but slightly veiled or disguised. The secret, non-communicable nature of the dream and the desire, veiled or outspoken, constitute, according to Freud's theory, the moving factors of the dream.

Freud's theory, though ingenious, and, I believe, unnecessarily involved, challenges criticism from two points of view; first, as to the secret or sexual content which he declares every dream contains; and second, as to his method.

In discussing Freud's theory, as applied to the unraveling of the psychoneuroses, in a paper read before the Philadelphia County Medical Society some years ago, I pointed out that the first criticism—a truly glaring criticism—which offers itself is the peculiar view which Freud holds in regard to the origin of obsessions. Breuer in his first patient, the patient whose case originally suggested the method, fancied or perhaps did detect in the history a cause of self-reproach or blame which had led to her hysteria, and the unloading or confession of which led to her prompt recovery. At any rate the studies made by his colleague, Freud, have led the latter to some very remarkable conclusions, conclusions to which comparatively few neurologists as yet have been able to subscribe. Freud believes that the various obsessions, hysterical and otherwise, have their origin in some passionate sexual action or aggression of childhood. Obsessions are, he says, always reproaches changed or evolved from the suppression of the memory of reproaches having this sexual origin; in other words, the memory of the sexual action itself, being repulsive or abhorrent, is suppressed, but the feeling associated with the memory persists in the mind and now associates itself with or attaches itself to some other memory or action and that in this way arise the various obsessions. Others than myself have dwelt on the glaring inconsistency of the sexual immaturity of children and the intrinsic biologic improbability of this theory. Perhaps Freud has himself been impressed by this fact, for of late years it would appear that he has retreated to the age of puberty, attempting to save the situation, however, by saying that the memory of these sexual events is projected from puberty into the period of childhood. Whether every dream has a secret or sexual content must be left to the sober thought and honest judgment of ourselves and others; must be left to the testimony of human experience in general. As far as my own experience goes, as far as the testimony of those in whom I have studied the subject of dreams goes, I must come unhesitatingly to the opposite conclusion. It is true that dreams with sexual content do occur, that unquestionably they occur in young persons, especially in young men and are no doubt normal accompaniments of sexual evolution; but that all dreams possess this secret content is certainly not in accord with general human experience, any more than it is in accord with our experience as neurologists that every obsession, for instance, is due to the suppressed memory of a sexual aggression in childhood.

Further, it is extremely probable that Freud by his method suggests the memories of sexual occurrences to his patients; in other words, that he elicits from them a fictitious memory of sexual events in their childhood, of events that have never occurred. Indeed, Loewenfeld gives an instance of a patient of Freud who subsequently came into his (Loewenfeld's) hands.[1] The woman stated to him that the sexual events which she had related to Freud when under his treatment had really never occurred. She declared that the whole thing had been a piece of pure imagination.

Not only does the presumption of a secret content in the dream, sexual in character, challenge criticism, but Freud's method of dream analysis is likewise open to criticism, similar to that which we apply to his method of psycho-analysis of the obsessions. The method that he practices for the elucidation of the obsessions is carried out under a condition which is such as to bring about in the patient a state of actual or borderland autohypnosis. He places the patient, let us remember, on her back; she closes her mind to every possible external impression; she lies perfectly still; concentrates her mind on her thoughts; and then in giving her account of her past experiences is expressly instructed to allow herself to drift at will, to tell everything, no matter what, that enters her mind. It is further admitted that the process is very fatiguing. It may be doubted whether conditions more favorable to autohypnotic states could be devised, and the presumption is justified that there is but little credence to be placed in the saying of a patient in this condition. It is extremely probable—indeed certain in cases of hysteria—that under such circumstances the patient will respond with alacrity to the slightest suggestion, inadvertent or unintentional though this may be on the part of the physician. That confession of imaginary sins, especially sexual transgressions, should be made under these circumstances is not to be wondered at.

1. Loewenfeld: Sexualleben und Nervenleiden, 1899, p. 195.

Now the very condition which Freud imposes in the analysis of the dream-content is equally comparable to an autohypnosis, and that under these conditions the material secured is unreliable, is extremely probable. It is presupposed that the mind, in reflecting on the dream, drifts at will without the guidance of what Freud calls the critique—which critique can be freely rendered as the personal equation of judgment. Such a severance of mental function as the conditions of the dream analyses imply, that is, the unrestrained drifting of thought and the suspension of all judgment, is not normal. Such a severance of function implies of itself a state of hypnosis—or a state of mind closely akin to hypnosis, and it certainly seems unphilosophic and unscientific to regard the various mental pictures resulting as representing the undoubted and intrinsic factors of the dream—as representing the essential features and the structure of the dream. There is nothing to justify such an inference, and yet Freud regards it as a foregone conclusion.

It is hardly the function of this paper to enter into a consideration and discussion of the origin and nature of dreams. Suffice it to say, however, that I believe, as does Samuely,[2] that dream conceptions arise just before the sleeper awakens, i. e., just as he is in the act of entering into consciousness. The dream conceptions are part and parcel of the act of awakening. The conceptions furnish the material from which the dream is subsequently constructed. This construction occurs only after waking consciousness has been established. The confused, simultaneously arising dream pictures are then arranged according to time and location, the lacunæ being filled in by the aid of the imagination and reflection. Semi Meyer[3] also believes that the dream history is usually constructed only after the person has awakened. According to Meyer, every dream is something added to the act of awakening. It is a phenomenon dependent on, and is a part of, the act of awakening. There is in every act of awakening an intermediate twilight state of mind, usually very brief, but sometimes prolonged, during which inroads, vague and indistinct, are made on the sensorium from without, and the conceptions thus arising, are, when the patient fully awakens, arranged automatically into some semblance of order and sequence both as to time and space. That long dreams, dreams of complex content and implying long duration of the dreaming act really occupy but a very short period of the dreamer's time has been repeatedly proved. Thus Flux[4] describes a dream in which the period of unconsciousness did not exceed ten seconds, and yet the dream dealt with a shipwreck with all its details, the time necessary for the occurrences being about three and three quarter hours. The truth is that the arrangement of the dream pictures is automatic, begins at once in the act of awakening, and is later often elaborated and dramatized. It is probable that when the awakening occurs quickly, i. e., when the transition to consciousness is sudden and complete, that the dream remains fragmentary. To take such a dream and submit its conceptions to a process, the essential features of which are indistinguishable from those of autohypnosis, may lead to almost any vagary. That the ideas resulting from this method are determined by the personal peculiarities of the individual, by his training, his education and his habits of thoughts; by his desires, his instincts and his sex, goes, I think, without saying; but that one has the right to ascribe to these ideas any value other than this, can be, to say the least, seriously questioned; to go so far as to say that because in one individual dreams usually have, or always have, a sexual content, therefore, we are to conclude that all dreams in all individuals have a sexual content, is, to say the least, not quite logical. To ascribe to ideas which are manifestly secondary abstractions, ideas evolved subsequently to the dream—a causal character, an etiologic value to explain preexisting symptoms, is again not quite logical. To say that the dream analysis of Freud unearths a repressed dream-complex, the unearthing of which gives relief to the patient, is merely to say that the patient dwelling on his dream and induced to speak without hindrance, merely tells the unpleasant, perhaps secret and personal fact or facts of his history which he would have told and constantly does tell without reference to any dream. The danger, however, arises, just as it does in Freud's psychoanalytic method, that the patient will fabricate, involuntarily or perhaps voluntarily, as did Loewenfeld's patient, and recite events that never occurred. Perhaps they are purely fictitious happenings to fill inconsistencies and lacunæ, and yet, arising spontaneously in the patient's mind, may be accepted by the patient as true and find a place among the memories of his actual experiences. Such a patient is, I believe, damaged, just as is a patient who takes away with him after an hypnosis, a persistent suggestion as to fictitious past occurrences.

We are all of us familiar with the relief which patients experience by giving a full account of their symptoms. Sometimes this account, although by no means invariably, embodies the recital of symptoms of a very personal and intimate nature and at such times the recital has all the force of a confession. That the relief of a patient under such circumstances is very great, we all of us know, and we know, too, that a strange and cumbersome procedure, such as is undertaken in a psycho-analysis, namely, the detailed recital of all the events of the patient's life, embodying especially the assumption of active, aggressive and other sexual occurrences in the patient's history, are unnecessary, just as they are painful, distressing and ethically objectionable; surely the dream analysis is alike unnecessary, if it be not, indeed, misleading and futile.

Finally, in the dream analysis, as in the other form of psycho-analysis, both the physician and the patient assume an expectant attitude of mind. The physician already believes, and the patient is involuntarily led to believe, that a cure of the monophobia, agoraphobia or what not, will supervene when a sexual trauma or aggression has been revealed; and it would seem that the more revolting or disgusting the incident unearthed, the greater its power to cure! Surely here is suggestion, involuntary and unintentional perhaps, but none the less suggestion. What also shall we say as to the rôle played by the shame, the self-abasement and the upheaval of the emotions, in the final result? Surely the theory of psycho-analysis commends itself to our understanding as little as does its practice.

Whether dreams ever really play a rôle in the etiology of nervous symptoms must, to say the least, remain an open question. We all know that patients not infrequently awaken from dreams in fright, as witness the familiar example of the nightmare, and yet to ascribe to the nightmare a uniformly sexual character, as does Ernest Jones,[5] is again stretching human credulity beyond the bounds of human experience.

2. Samuely: Ztschr. f. Psychotherap., 1909, i, No. 3, p. 150.
3. Meyer: Ztschr. f. Psychol., 1909, lxiii, 206.
4. Flux: Brit. Med. Jour., 1901, ii, 13

5. Jones: Am. Jour. Insanity, 1910, lxvi, No. 3.

That dreams are sometimes followed by symptoms, every alienist knows, but even here it is probable that the dream is itself really a product of the already existing psychosis. Such, for instances, are the cases recorded by Santi di Sanctis.[6] Kazowsky,[7] again, describes a case in which a dream of murder preceded the actual commission of a murder. Penta[8] describes cases in which periods of intense excitement of short duration followed dreams and in one of these cases the dream likewise preceded the murder. Others might be added to this list, but it is safe to say that in these cases the dreams were always symptomatic of the preexisting mental disease and in no sense prodromal.

If, in conclusion, we are asked as to the rôle that dreams play in etiology, we are justified, to say the least, in the inference that that rôle is a very doubtful one; dreams are probably always symptomatic and never causal. Finally also, we may conclude that their symptomatic value is of little consequence.

1719 Walnut Street.

THE SO-CALLED ŒDIPUS-COMPLEX IN HAMLET *

JAMES HENDRIE LLOYD, M.D.
PHILADELPHIA

Of all Shakespeare's plays Hamlet is the one which has the most peculiar and abiding interest for medical readers. This is mainly so because of the problem of insanity which it presents. This problem has been as gravely discussed by alienists as though Hamlet were a real person and not a mere creature of the imagination. But in a wider sense the play appeals to the student of mental phenomena because of its psychologic, as distinct from its psychiatric, questions. The most accomplished literary critics have thus propounded many theories, and in Germany a whole body of literature has grown up about this question. To attempt even to enumerate these various theories is out of my present range, and I will merely quote one writer in *Blackwood's Magazine,* who in his despair announced that Shakespeare himself could not have written a regular dissertation on Hamlet—and then proceeded to write one himself. But if Shakespeare could not have given us a satisfactory explanation of the Prince of Denmark's mental state, I can hardly be expected to do so either, and I must beg to be excused from the attempt.

My object is not so much to discuss Hamlet as to discuss briefly a recent theory which has been advanced to explain Hamlet. The task is really not of my own choosing, but I was drafted into it by the council of this society, who must have thought I was peculiarly fitted still further to obscure the subject. They probably did not expect me really to pluck out the heart of this mystery, but merely to demonstrate that there are more things in heaven and earth than are dreamt of in my philosophy.

We have come to an era of what may be called subterranean psychology. We are invited to plunge boldly into the subconscious, the "subliminal," and in these dark underground recesses of the mind to search with confidence for the data practically of a new science. The eagerness with which this call has been answered by all manner of men and women is shown curiously in widely divergent tendencies, in medicine, in literature, and in religion; and as a result we have psycho-analysis, Christian Science, the Emmanuel movement in Boston, and the Œdipus theory of Hamlet as promulgated by Ernest Jones. All these tendencies can be classed together in what may be called the cult of Freud.

According to Ernest Jones the whole mystery of Hamlet is to be explained by the theory of Freud's "repressed emotions." This is his thesis in a nutshell. Hamlet is "suffering from an internal conflict, the essential nature of which is inaccessible to his introspection." In other words, the Prince did not know what it was that ailed him. Moreover, Shakespeare himself did not know what it was; the audience has never known what it was; the commentators do not know what it was; nobody knows what it was but Jones, and he has discovered it by the methods of psycho-analysis, applied to the play after three hundred years.

The nature of this conflict is about as follows: Hamlet as a boy had an intense passion for his mother. This was not what the world in its ignorance calls the natural affection of a child for his mother, but it was distinctly erotic; in short, the first manifestation of sexual passion. We are assured that this is not uncommon, and that women of a passionate nature frequently inspire this feeling in their young sons. Jones even quotes with approval Freud's dictum that "the mother is the first seductress of her boy."

Hamlet soon learned, however, that this would never do. The conventions of the world, or of "the herd," as Jones calls it, frowned on such erotic emotions of a boy for his mother; consequently Hamlet early learned to "repress" these emotions. Here, you see, we are at once introduced into the Freudian amphitheater. Hamlet has a great store of "repressed" sexual emotions for his mother, which in time he forgets, but which are ready to assert themselves when the opportunity offers.

As a natural corollary to this youthful experience, Hamlet had developed a feeling of jealousy for his father. But this feeling also he had instinctively "repressed," until it was forgotten, relegated to the limbo of the subconscious; and in its place had even grown up a strong affection for him, as manifested in the play.

This being the state of Hamlet's subliminal mind, all these "repressed emotions" would probably have remained quiescent, deeply buried many fathoms deep in the subconscious strata of his psyche, if it had not happened that his uncle killed his father and promptly married his mother. The effect of this cataclysm was stupendous, and I confess that the psychologic processes as expounded by Jones are from this point somewhat difficult for me to follow, although I have read his paper very carefully twice over. As I understand the psycho-analysis, however, the result was somewhat as follows:

Hamlet had laid on him the task of avenging his father's death, and, as we all know, began that remarkable career of vacillation and declamation which leads no whither, and which constitutes the mystery of the play. Now, according to Ernest Jones, this is all to be explained by the surging up of these old "repressed emotions." Just why or how, I confess I do not see; but we are assured that the thought of killing his uncle, who stands as a sort of rival to him in his mother's affections, sets all this underground machinery to going (if I may be pardoned the term), and that this is so intolerably painful to Hamlet that it paralyzes his will and arrests

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6. Santi di Sanctis: Jour. de neurol. et d'hypnol., 1897, Nos. 23-24, p. 473.
7. Kazowsky: Neurol. Centralbl., 1901, xx, 440.
8. Penta: Riv. mens. di psichat. fas., 1902, p. 324.

his hand. The concatenation of events is not at all plain to me, but I give it as accurately as I am able to interpret Ernest Jones. The argument seems to require that there is some deep and obscure association of ideas in Hamlet's mind, which he himself does not recognize, but which evokes from his subconscious memory painful "repressed emotions" which were inspired in him in childhood by his mother, and which were sexual in tone. Whether this is genuine science or whether it is mere vulgar fantasy, I leave to the consideration of others.

Ernest Jones calls this the "Œdipus-Complex," a term which he also borrows from Freud, because he sees in it a train of psychologic phenomena similar to what is seen in the old Greek legend of Œdipus. Let us see.

The "Œdipus Tyrannos," one of the two dramas by Sophocles which embody the most familiar form of the legend, is one of the masterpieces of Greek tragedy. The hero is the son of Laius, king of Thebes, and of Jocasta, his wife. An oracle had warned Laius that he would meet his death at the hand of a son of his own; consequently Œdipus at his birth was given by his father to a herdsman to be exposed to die on Mount Cithæron. But the infant was rescued, and was reared by Polybus, king of Corinth, as his own son. When he grew to manhood he was taunted with being a supposititious child, and he repaired to Delphi to consult the oracle. The god warned him that if he returned to his native country he would kill his father and commit incest with his own mother. To avoid this fate he resolved to shun Corinth, thinking that to be his native country. Wandering through Greece, still ignorant of his own origin, he happened to meet his father, King Laius, attended by only a small retinue, and in an altercation he killed the king, of whose identity he was ignorant. At this time a monster, called the Sphinx, sent by Juno to ravage the kingdom of Thebes, proposed the celebrated riddle, on the correct solution of which depended the redemption of the city. Œdipus hastened to Thebes, answered the riddle, and was proclaimed king. To complete the horror of the situation he straightway married the widowed Jocasta, his own mother, both of them being entirely innocent, for they were ignorant of their mutual relationship. By her he had children, one of whom was his devoted daughter, Antigone. He was thus caught in the meshes of an appalling tragedy.

The drama of Sophocles deals entirely with this situation, and unfolds it with all the intensity and concentration which the unities of Greek tragedy had developed into a supreme art. No one can read this drama, even in an English translation of to-day, without being profoundly moved with the simplicity, the pathos, and the accents of an irrevocable doom which speak to us across the long lapse of more than 2,000 years.

There is nothing in this tragedy by Sophocles to invite the modern methods of psycho-analysis. There is nothing in it that I can discover of the subliminal or the subconscious or the play of "repressed emotions." It was contrary to the Greek genius to deal in such obscurantism. All is as clear and as open as day. The audience knew the story well; it was only the hero and his mother who were ignorant of their horrible involvement; and as an acute critic has pointed out, it is this very contrast between the attitude of the audience and the ignorance of the hero that gives to the tragedy a singular note of the irony of fate. When the final revelation comes it comes as with the climax of doom: Jocasta kills herself, and Œdipus puts out his eyes and goes forth a wanderer on the earth, led by the devoted Antigone.

I fail to see in this tragedy any essential resemblance to the situation in Hamlet. The Prince of Denmark was not involved in any mystery arising out of mistaken identity. He knew perfectly who his mother was, and she knew that he was her son. This alone is enough to stamp the radical difference between Hamlet and Œdipus. The theory that Hamlet had any "repressed emotions" of amatory passion for his mother, is entirely gratuitous, and outrages every sentiment of nature as well as every canon of art. There is no expression in the play that I know of that supports such a theory, and it is only by reading it into the play between the lines by a process of artificial psycho-analysis that such a monstrous theory has its origin. It is supported neither by science nor by literary criticism, and of all the theories yet sprung to explain the so-called psychology of Hamlet it is the vilest and the most far-fetched.

The emphasis laid on sexual ideas by Ernest Jones in his paper is highly characteristic of the whole Freudian school. They seem absolutely obsessed with ideas of sex. They cannot get their minds out of this channel; and it would be an interesting test of the value of their own psycho-analytic methods for somebody to turn their guns on themselves, and see to what repressed sexual emotions in their own subliminal strata is due this overemphasis of a somewhat forbidden subject. Can it be that the whole Freudian phenomenon is a form of sexual neurasthenia breaking out among a class of idealistic men and women with a tendency to scribble?

I do not pretend myself to pose as a critic of Shakespeare, but there are some thoughts which I offer in conclusion, with the more confidence as they are not entirely my own. I do not believe myself that there is nearly as much of a profound mystery in Hamlet as the critics and commentators are disposed to see. They are looking for something which is not in the play, and they have consequently wrapped it in unnecessary obscurity. Mr. Furness, of this city, the most eminent of living Shakespearian commentators, sweeps the whole problem of Hamlet's insanity aside by saying that he was neither insane nor pretended to be insane. It is impossible to classify his insanity, or to make it accord with our scientific ideas.

As a dramatic writer, moreover, Shakespeare had his faults. In common with all English playwrights he ignored the law of unities as observed by the Greek dramatists. A comparison of Hamlet with the Œdipus of Sophocles makes this apparent. The Greek holds the situation thoroughly in hand and goes straight to the climax, but the climax in Hamlet is lame and unsatisfactory.

But in my opinion the most glaring inconsistency in Hamlet is the age of himself and his mother. He is represented as a man of thirty; this at once must place his mother well along in middle life, and yet she is presented as a woman in the full bloom of her sexual charms. This bears directly on the subject of this paper.

All readers feel the fascination of Hamlet. His personality has appealed to men and women far more than any fictitious character in modern literature. I believe this is the keynote of the alleged mystery and of the romance which surround him. His grace, his personal magnetism, his melancholy, his philosophizing, his wit, his princely station and bearing, his love for Ophelia, his unhappy destiny, have all served not only to attract but to dazzle mankind. A discerning critic has said that the deep and permanent interest is in the conception of Hamlet himself rather than in the plot. In other words,

Hamlet is greater than the play. No theory is necessary to explain this: it is simply Shakespeare's transcendent poetic art which has presented us with a complex and lovable character.

If Shakespeare had his faults as a technical dramatist, we must remember that he was simply writing for the entertainment of a sixteenth century English audience. He was not writing history, or biography, or science, or metaphysics, and least of all was he indulging in any process of psycho-analysis. Probably no one would be more astonished than he at the theories of Freud and his followers. To take Hamlet and attempt to pump out of him a whole lot of "repressed emotions" of sexual love for his own mother, is not only disgusting, but is no more sensible than to stand by the side of a beautiful marble statue, and, with note-book in hand, to pretend to jot down the story of the statue's subconscious life as imbedded in the depths of its marble head.

Mr. Furness has somewhat tartly said that there has been much commenting on Shakespeare which is a nuisance and a weariness of the flesh. This was even before the appearance of Ernest Jones' essay, or of my present paper.

3918 Walnut Street.

CHRONIC GLANDERS IN MAN

REPORT OF A CASE: PATIENT TREATED WITH GLANDERS VACCINE. APPARENT CURE

WALTER C. CRAMP, M.D.
NEW YORK

In 1906, C. D. Robin of the Royal Victoria Hospital, Canada, reported 156 cases of chronic glanders, collected from medical literature. Since this excellent review of the subject there have been reported but four definite cases, accessible to me—one by Post and one by Sieur in 1907, one by Dr. A. T. Bristow of Brooklyn, and one recently shown at the New York Surgical Society by Dr. Hitzrot. Several cases of acute glanders have occurred, however, and have been chronicled.

After reading Robin's article and noting his conclusions, drawn from an exhaustive study of his many cases, one is forcibly impressed by two salient facts; first, that chronic glanders in man is an exceedingly rare disease, unless many mistakes in diagnosis are made; second, that the mortality is extremely high, only 6 per cent. of the 156 cases reported being positively known to have resulted in a cure. These two facts alone seem to offer sufficient justification for the publication of the following case, which came under my observation in Bellevue Hospital in the service of Dr. J. D. Bryant, to whom I am greatly indebted for the privilege of studying and recording this case as one of those in which an apparent cure was obtained, the patient remaining free from the disease for a period of eighteen months. No further report of the case is possible, as the patient has returned to his native home.

In presenting this record the rule used both by Robin and Bollinger is employed to differentiate between the chronic and acute form of glanders, namely, the existence of the disease for six weeks or longer. In reporting this case, also, I have refrained from a positive statement relative to actual permanent cure, realizing that it is very difficult to state definitely just when a patient with glanders can be considered cured, as so many of those patients reported as affected, even after many months, and in a few cases after many years, finally succumb to the disease.

This patient, as stated above, had remained free from any symptoms of glanders for eighteen months, was in good health, doing hard work daily, and had also been under close observation. This patient was treated with glanders vaccine, which proved of inestimable value in controlling the disease. The vaccines were made by the New York Board of Health from a glandered horse and kindly furnished to me by Dr. W. H. Park. These vaccines were not standardized, and so the actual number of bacteria is not definitely determined, but estimated at fourteen to twenty million per cubic centimeter. The report of the case follows:

History.—M. M., aged 34, a Pole, a cement worker, was admitted to Bellevue Hospital, Oct. 20, 1908. There was nothing in the family history which could possibly have had any bearing on his illness. The patient's habits were good, he drank four or five glasses of beer daily, ate and slept well, and worked very hard. He was employed in making cement walks; was exposed to wet and cold a great deal, his feet often becoming wet and his clothes soaked by rain.* In no way was he ever directly associated with the care or handling of horses, nor was any member of his family. No other member of his family was ill.

Previous Illness.—One year previous to his admission to the hospital the patient had had a "stitch" in his right side. He was ill about one week and made a good recovery, except that occasionally he had a slight cough without expectoration. Generally speaking, however, he enjoyed fair health, working each day and eating well.

Present Illness.—Four weeks previous to admission, the patient's clothing became wet through from exposure and the same evening he had chills and fever, followed by profuse sweating. He had similar attacks three or four times weekly previous to his admission. One week after the first chill, there appeared a swelling over the right forearm, followed the next day by one over the left forearm and right thigh, without any association of pain or tenderness over them.

Clinical Data on Admission.—When the patient entered the hospital he had a temperature of 100.2 F., pulse 120, respiration 24. Blood: Leukocytes, 11,400; polynuclears, 78 per cent.; lymphocytes, 17 per cent; transitionals, 2 per cent; basophils, 2 per cent; eosinophils, 1 per cent. Urine: amber, clear, urinous odor, sp. gr. 1.022, faint trace of albumin; many leukocytes, amorphous urates, and a few hyaline casts.

General Physical Examination.—The patient was of medium frame and poorly nourished; mucous membranes clean, but anemic; pupils equal, reacted normally to light and accommodation; tongue heavily coated, slightly tremulous; pulse regular, of moderate tension. There were a few sibilant râles over base of the right lung; no nasal discharge nor expectoration; inguinal and axillary lymph-nodes palpable; reflexes normal.

Lesions.—Small abscess over radial side of middle third of left forearm; another on ulnar side of right forearm near elbow; another on posterior surface of calf of right leg, five inches below knee, and still another about six inches in length over posterior aspect of left thigh at the middle third. There were no signs of inflammation referable to these tumors and no pain nor tenderness associated with them. These abscesses, which were deeply situated in the muscles, were opened under cocain anesthesia, the cavities irrigated with mercuric bichlorid solution and drainage instituted. The pus was of a chocolate color, fairly thick, with no odor. The report of the findings obtained by examination of the pus is given in full below by Drs. Norris and Pappenheimer of the Pathological Department of Bellevue:

PATHOLOGIC REPORT

"A deep abscess situated on the posterior and outer aspects of the middle third of the right thigh was aspirated with a sterile syringe, about 5 c.c. of pus being withdrawn. Morphologic examination of this pus on smears and in hanging drop revealed no microorganisms.

"Cultures made on slanted and coagulated Loeffler's blood-serum, and on agar tubes, remained sterile after a week in the incubating oven. With this pus two guinea-pigs were inoculated, one subcutaneously, the other intraperitoneally.

"November 7, seventeen days after inoculation, the pig inoculated subcutaneously was found greatly emaciated, and had developed at the site of inoculation an abscess of considerable size, say 3 cm. in diameter. The abscess was incised, and the pus evacuated. Smears made from this pus revealed a few Gram-negative rods, which closely resembled in their morphology the *Bacillus mallei*. Besides these rods of distinctive morphology, there were found a number of involution and degeneration forms, and of globules and round masses, not staining by Gram's method, but taking on an after-stain with fuchsin.

"Cultures made from this pus yielded in forty-eight hours, on slant glycerin-agar, a growth of Gram-negative rods, resembling the glanders bacilli in morphology. With this pus, an emulsion of a glycerin-agar slant was made and inoculated into two large male guinea-pigs, each pig receiving approximately half of the agar culture emulsion.

"The pigs showed a marked and prompt reaction after inoculation, and the morning following the inoculation both pigs were very ill, with hair standing on end, extremely sensitive to the touch, especially on the peritoneum, and with greatly enlarged testicles. The pigs were found dead the following morning, approximately thirty-six hours after inoculation.

"Examination of both pigs showed a diffuse general serofibrinous peritonitis, and the typical exudate on the tunica vaginalis. The organism was found in the exudate of both guinea-pigs in smears, and by culture. The two guinea-pigs inoculated with the human pus were greatly emaciated, and were chloroformed November 13, in a moribund condition, twenty-three days after inoculation. The pig inoculated subcutaneously showed no lesions in the gross beyond the abscess at the site of inoculation in the skin. The pig inoculated intraperitoneally showed a number of well-encapsulated abscesses in the peritoneum and retroperitoneal lymph-nodes, and in the skin at the site of the puncture of the needle, and abscesses of the liver.

"The bacillus which was isolated corresponded in all morphologic characteristics with that of the *Bacillus mallei*. It decolorized by Gram's stain. The cultural characteristics corresponded in every way to that of the glanders bacillus, giving a characteristic growth on potato and blood-serum.

"Microscopic examination of the tissues of the lesions of the two guinea-pigs inoculated with human pus show the typical lesions of glanders, with numerous characteristic bacilli."

A blood-culture made also at this time proved positive.

The patient ran an irregular temperature till Nov. 5, 1908, when he insisted on returning home.

In December of the same year the patient was seen by me, he in the meantime having received treatment in one of theNew York dispensaries. At this time the wounds were all healed and I decided to show him before the Bellevue Alumni Association in February, 1909, but when he was seen again, in January, 1909, two of the old wounds were discharging pus, the patient was having some elevation of temperature, chills and sweats. He was admitted to the isolation ward at Bellevue in this condition on Jan. 22, 1909, with a temperature of 102 F., pulse 108, respiration 24. He had a leukocyte count of 12,000; polynuclears, 78 per cent.; lymphocytes, 20 per cent.; basophils, 1 per cent.; eosinophils, 1 per cent. Staphylococci were found in smear and culture made from pus obtained from arm and leg, but no *Bacilli mallei*. No *Bacilli mallei* were found in the sputum. The agglutination test was negative.

Treatment.—January 29, 8 minims of glanders vaccine were injected into the gluteal region. In six hours the temperature rose from 100 to 104 F., pulse from 88 to 124, the patient had a severe chill and sweat, and there was considerable reaction in the region of the injection. The temperature dropped gradually to normal in three days and inflammation about the gluteal region subsided. This dose was considered too large and so on February 5, 4 minims were injected as before, the temperature rising to 102 F., and the pulse 108.

February 8, 4 minims were again injected; the temperature rose to 105.8 F., with chill and sweat. An interval of five days was then allowed before another injection of 4 minims was made. The temperature rose to 100 F., and pulse to 96.

February 21, 4 minims were injected. The temperature rose to 104.8 F., pulse to 118. About this time the patient was shown at the Alumni Association. At this time his general condition was markedly improved, but there was a slight discharge from the wound in the right forearm.

The patient insisted on going home and was subsequently treated by me at Bellevue Hospital Dispensary as follows: March 1, 1909, 4 minims of vaccine were injected. April 6, when he returned all wounds were healed and the patient's general health was excellent. He was given 4 minims, however, and again on April 20, May 4, May 18, June 4, and June 21, respectively, on which occasions there was very little, if any, reaction to the injection. Subsequently the patient was seen by me at different times, the last time being eighteen months after all his symptoms had disappeared. In October, 1910, in endeavoring to locate the patient, I was informed that he had returned to his native country, and so no further report is possible.

CONCLUSIONS

There are several points in connection with this case and chronic glanders as a whole which I wish to bring forward.

1. Cases of chronic glanders can easily be overlooked unless one is constantly on the lookout for the disease.
2. Multiple abscesses, especially on the extremities, without definite cause, should excite suspicion, as Robin has shown that in 80 per cent. of cases multiple abscesses occur.
3. In this case there was no direct association with horses.
4. The point of entrance of the infection was unknown in this case, no abrasion on the body being present and no history of a wound being obtainable.
5. There was never any nasal discharge.
6. The patient remained apparently cured for six weeks and then showed a return of symptoms.
7. No bacilli were found in the sputum.
8. Extreme exposure to bad weather seems to be a predisposing cause.
9. This case was proved to be one of glanders by laboratory methods and by reaction to the vaccine injections.
10. This patient was apparently cured by vaccine injections.

349 West End Avenue.

CASE OF CHOKED DISK AND PROGRESSIVE BLINDNESS DUE TO SARCOMA OF THE BRAIN

JEROME B. THOMAS, A.B., M.D.
SANTA CRUZ, CAL.

Some years ago I reported in part[1] a case of choked disk probably due to brain tumor. Recently I have heard of the termination of this case in operation and death, and I consider the complete case of enough interest and importance to submit for publication again. In giving the early history of the case I shall draw at length on the original record included in my earlier report.

Patient.—A man, aged 22, first came under my care Dec. 11, 1906, in the clinic of Dr. W. E. Lambert, New York Eye and Ear Infirmary; he stated that two weeks previously he had been "struck blind" at the car-barns, where he was waiting to take out the car of which he was conductor, but recovered the vision of his left eye about five minutes later to such an extent that he was able to take charge of his car for about

1. Thomas, J. B.: Long Island Medical Journal, November, 1907.

two hours longer, when he was allowed to go home; he never regained the vision in his right eye. He had had a burning pain in the eyes just after the stroke of blindness, but had slept well that night, and since then had had no pain of that character. His vision at the time of examination was fairly clear but frequently blurred for a moment, giving him a depressing sense of insecurity and of impending blindness. His history previous to the sudden loss of vision was as follows: Three years before, and again, two years before, he had attacks of unconsciousness, epileptoid in character, during the night; one year before he had attacks of transient numbness of the right face, arm, body and leg, beginning in the arm and lasting a few minutes.

Examination.—Right Eye: Total blindness; the optic nerve-head was yellowish gray, raised by swelling about 1 mm. above the surface of the retina; the central vessels were much engorged; there were several bright white splashes of retinal atrophy between the disk and the macula. This eye had probably been blind for several months, but the fact was not recognized by the patient until his other eye failed.

Left Eye: Vision 20/40. The optic nerve-head was raised about 1.5 mm. above the retina, and its borders were blotted out by a yellowish exudate extending into the retina; the central vessels were intensely congested, and the center of the disk was covered by a network of congested capillaries. The whole appearance was that of an acute process as compared with the atrophic changes in the other eye; the field of vision was about normal; both pupils were dilated and reacted to light, accommodation and convergence, though feebly at times; spontaneous oscillations of the pupils made it difficult to determine the pupillary reactions but the results were verified by several examinations made on different occasions.

Possible foci of infection were sought in the ears, nose, and accessory sinuses, but with negative results. An examination of the urine was negative. There were no traces of syphilis, and the patient denied having any venereal disease.

Treatment and Course of Disease.—After about three weeks' treatment with large doses of the iodid of potassium without improvement, the patient was given daily hypodermic doses of pilocarpin, beginning with gr. 1/12, and finally reaching a daily dose of gr. ¼.

Mercury and iodids were given by mouth at the same time. After three weeks of this treatment the patient was discharged from the wards. The exudate about the optic disk was more circumscribed and the central vision was a little more acute, but there still were frequent momentary lapses of vision. The field of vision was moderately contracted.

About Feb. 1, 1907, the headaches became more severe and the patient had occasional attacks of vertigo. His central vision was still 20/40, but he was more often subject to momentary lapses, and his field of vision was becoming ominously contracted. The consensual pupillary reactions were examined carefully on several occasions and found to be positive, though feeble. The tendon reflexes were normal, and the function of the cranial nerves normal; there were no areas of anesthesia, no symptoms of acromegaly; the temperature sense was normal.

Although there were no motor or other localizing symptoms on which to base a diagnosis of cerebral tumor, it was thought justifiable, in view of such marked symptoms of intracranial pressure as progressive choked disk and persistent headache and vertigo, to advise a decompressive operation for the relief of pain and with the hope of arresting the strangulation of the optic nerve fibers of the left eye. Both operation and lumbar puncture were refused.

By the third week in February the frontal headache and attacks of vertigo were still more severe. The patient appeared dazed at times like one awaking from a deep sleep; his vision had fallen to 20/100, and his field was telescopic.

The patient then ceased to visit the infirmary, and I lost track of him until April 10, 1907, when I examined him in Bellevue Hospital, by the courtesy of Dr. Alexander Lambert, in whose wards he had been treated for several weeks. The only trace of vision remaining was a slight and doubtful perception of light when flashed into the macular region of the left eye. He had frequent intense headaches, and vomited a little every day. Both pupils reacted feebly to light; the consensual reactions were doubtful. There was slight, if any, change in the swelling of the optic nerve-head. He was taking 150 gr. of potassium iodid daily for the relief of the pressure symptoms.

Operative Findings.—The patient was soon removed from Bellevue by his parents and the next news I had of him was that he had been operated on Nov. 26, 1907, at the City Hospital, service of Dr. H. D. Collins, to whom I am indebted for the final data in the case. A tumor was found in the cortex of the brain, about 2 inches in diameter, "lying partly in the posterior part of the left frontal and anterior part of the left parietal region." The tumor was diffuse and could not be enucleated. The patient died within a few hours after the operation; no autopsy was permitted. The laboratory reported the tumor as a "large round-celled sarcoma, very vascular."

Although there are several gaps in the history of this case and no post-mortem examination could be secured, it constitutes a valuable unit in the statistics of optic neuritis and brain tumor.

The case demonstrates the value of optic neuritis as a very early sign of brain tumor; it developed in this patient at least four months before the appearance of other distinctive symptoms.

Progressive narrowing of the field of vision in optic neuritis is of evil omen, although the central vision may remain nearly normal and the appearance of the nerve-head show no change. This fact is familiar to the ophthalmologist, but not always appreciated by the general practitioner or the surgeon.

The experience of my patient gives one courage to advise the decompression operation early for the relief of impending blindness before the appearance of motor or other localizing symptoms.

Dr. Saenger, the eminent Hamburg neurologist, said in his address[2] before the American Medical Association at St. Louis in 1910, that he preferred to postpone a decompressive operation until, with choked disk, the vision begins to show impairment. By this I infer that he refers to peripheral as well as central vision. Dr. J. A. Bordley, Jr., of Baltimore, discussing Dr. Saenger's paper and speaking as a collaborator of Dr. Harvey Cushing, said that there was no change in the optic disk with which he was familiar, from the active stage of hyperemia to the later stages of atrophy, in which a decompression operation was not advisable. Dr. J. Herbert Parsons of London, in discussing the same paper, stated that the advisability of surgical interference in these cases, and the time of operation as well, should be determined by the ophthalmologist rather than by the neurologist; for the only palliation in many of these cases is the retention of vision during the rest of the life of the patient, which may last for a period of months or even years. The neurologist is inclined to wait so long for the more definite and convincing focal symptoms that he often delays the palliative operation until the optic nerve fibers are irreparably injured. That such conservatism is unnecessary and is contra-indicated is proved by the experience of our best brain surgeons and the case is strongly stated by Dr. Saenger as follows: "Palliative trepanation of the skull according to the modern standing of surgery, in the hands of a skilful surgeon who has experience in neurologic work, is almost without danger and an extremely beneficial operation, which I should recommend in every case of inaccessible brain tumor, in order to ease the torments of the patient, and above all to save him from impending blindness."

2. Saenger, Alfred: Choked Disk in Its Relation to Cerebral Tumor and Trephining, THE JOURNAL A. M. A., Sept. 24, 1910, p. 1100.

Viewing my case history in the light of some of the conclusions reached by Leslie Paton[3] in his study of 400 cases of brain tumor, the following facts may be noted:

1. The tumor was precentral and the accompanying optic neuritis was very severe. Paton concludes that precentral tumors are nearly always associated with a fairly severe neuritis, whereas postcentral tumors are nearly always associated with a moderate neuritis. It is unnecessary to remind the oculist that the severity of the optic neuritis should be judged not so much by the loss of vision as by the height of the swelling of the disk, turgescence of the retinal vessels, the extent of hemorrhages and patches of exudate.

2. The eye on the opposite side of the tumor was first affected.

3. The difference in severity of the optic neuritis in the two eyes could not be noted because the process in the right eye had begun the atrophic stage and in the left eye was at the height of the acute stage when the patient first came under observation. Both the second and third signs as noted above are untrustworthy, according to Paton. In about one-half of his cases a difference in the severity of the neuritis in the two eyes was observed, but the more severe neuritis often occurred on the opposite side from the tumor.

REPORT OF A CASE OF ANENCEPHALUS

D. S. KALAYJIAN, M.D.
PARKER, S. D.

The following report of a case of anencephalus presents some points of interest.

Mother's History.—The mother, white, American, aged 42, was married at 17 and had nine children. Twenty-two years ago, she gave birth to her second child, a hydrocephalous female infant. She stated that she had unusually difficult labors with all her female children.

Present Confinement.—Labor occurred Jan. 29, 1911. On examination I found the abdomen unusually large, the umbilical region being rather flat, and the sides fuller than ordinary. The limbs of the fetus could be felt on the left side. By bimanual examination, a water sac could be felt, filling the roomy vagina and projecting from a partly dilated cervix. Combined version having failed, I anesthetized the patient, dilated the rigid os manually, cut the tough membrane, performed podalic version, and delivered an anencephalic fetus, which lived but a moment after birth. I estimated the amount of liquor amnii at nearly 4 gallons. The third stage of labor was normal. The placenta showed no abnormality, but the umbilical cord was about a foot long, as thick as a man's thumb, and markedly congested.

Description of Fetus.—The child, a female, weighed about 6 pounds and was well developed, except the head, which was hardly larger than a small orange. The external tissues were lacking over a space extending from just above the supraorbital arch of the frontal bone to the superior nuchal line of the occipital and from the zygomatic process of the temporal bone on one side to the corresponding point on the opposite side. The sunken brain was exposed and showed cherry color through the delicate membrane covering it. The convolutions were very indistinct, except over the frontal lobes, which were elevated, round, and about half as large as a small English walnut. The mouth, chin and cheek, and the lower part of the nose were normal, but the root of the nose was decidedly flat and the eyeballs were protruding. There was a strip of hair about half an inch wide around the neck. Unfortunately no necropsy was permitted.

3. Paton, Leslie: Brain, 1909, xxxii, No. 125.

The case presents the following points of interest:

1. The birth of two abnormal fetuses from the same mother at an interval of twenty-two years, all the other children being normal. Edgar says of hydrocephalus: "It has been observed to occur several times in children of the same mother." I have failed, however, to find any reference to a mother giving birth to a hydrocephalous child at one time and to an anencephalous child at another.

2. Both of the monsters were females. Is this merely a coincidence?

3. A possible relation of hydramnion to anencephalus. J. C. Webster gives anencephalus as an etiologic factor for hydramnion.

REPORT OF A CASE OF BRONCHOPNEUMONIA, SHOWING POSITIVE BRUDZINSKI NECK AND COLLATERAL SIGNS

MARTIN J. LOEB, M.D.
NEW YORK

In view of the cases reported by Brudzinski and Morse, in which Brudzinski's neck sign was constantly absent in all diseases other than those of the nervous system, I believe that the report in my case will be of interest. Before proceeding, however, to the history of the case, I shall briefly describe these signs:

Brudzinski,[1] while trying to test the rigidity of the neck in a child suffering from tuberculous meningitis, observed that flexion of the neck caused the legs to become flexed on the thighs, and the thighs on the abdomen. He followed this observation up in other cases and found this sign to be positive in 95 per cent. of children ill with tuberculous meningitis, and in 100 per cent. of those ill with either cerebrospinal, serous or pneumococcus meningitis. The sign was found to be absent only in the late comatose stage (*état agonique*) of tuberculous meningitis.

Brudzinski found this sign present in one case of mongolian imbecility, in one case of meningism, and in four cases of arrested development. He never found the sign to be positive in any other acute disease, or in normal cases.

Morse,[2] who has examined 400 patients, agrees with Brudzinski.

TECHNIC TO ELICIT "NECK SIGN"

The head is forcibly flexed with the left hand, while the child is lying flat on its back; with the right hand, pressure is exerted on the chest to keep the child from being lifted. If the sign is positive, both legs will flex on the thighs and the thighs on the abdomen.

The identical collateral sign consists in flexing one leg on the thigh and the thigh on the abdomen when the opposite lower member will assume the same position.

With this brief description I shall proceed to the history of my case.

History.—Baby B., aged 9 months, had a normal but difficult birth; no instruments were used. It had been artificially fed since birth. Stools passed twice daily, yellow, no curds. Nutrition was good. Family history is negative. There is a history of scarlet fever (?) three weeks before I saw the child. The infant became suddenly ill on Jan. 27, 1911; the mother observed fever and cough.

1. Arch. de méd. des enfants, 1909, xii, 745.
2. Arch. Pediat., 1910, xxvii, 561; Northrup: New Reflex Signs in Meningitis Diagnosis, THE JOURNAL A. M. A., Jan. 14, 1911, p. 114.

Physical Examination.—The head was abnormally shaped, the left occipital region sloping downward and being depressed. It had been so since birth. The anterior fontanelle was one-half inch wide; there was no bulging or pulsation. No flatness could be elicited over the skull. The tongue was coated. Prostration was intense. Respiration was rapid, but not accompanied by pneumonic grunt or dilation of the alæ nasi. The pulse-respiration ratio was 2½ to 1. The lips were slightly cyanosed. There was slight rigidity of the muscles of the neck. The chest showed diminished expansion on the left side. There was no dulness, and neither râles nor bronchial breathing, though on the third day small mucous râles and bronchial breathing could be made out in the lower midaxillary region on the left side. The abdomen was not large, was rather soft and flabby. The spleen and liver were slightly enlarged. Heart action was rapid but there were no murmurs.

Reflexes: The pupils were normal and reacted to light; there was neither nystagmus nor ptosis of the lids. Brudzinski's neck and collateral signs were present. Kernig's and Babinski's signs were also present.

All these signs were elicited up to the third day. Between the third and seventh days I did not try to obtain them. On the seventh day the temperature was normal and these signs were no longer obtainable.

The temperature ranged between 102.5 to 104 F.; respiration ranged from 65 to 90 and was irregular; pulse varied from 160 to 200. The child made an uneventful recovery.

1410 Wilkins Avenue.

THE TREATMENT OF CANCER WITH BODY FLUIDS AND CANCEROUS ASCITIC FLUID

EDWARD H. RISLEY, M.D.
BOSTON

This paper is a report of the work done at the Massachusetts General Hospital, under the direction of the Cancer Commission of Harvard University, during the months from February to September, 1910, inclusive, on the treatment of inoperable cancer with the various normal and abnormal body fluids and with cancerous ascitic fluid.

This line of work was suggested by the results obtained by Hodenpyl of New York, which were reported in February, 1910.[1] The purpose of the present investigation was twofold: (1) to determine whether any curative properties existed in the ascitic fluids of cancerous patients; and (2) to determine what effect the various normal and abnormal body fluids, non-cancerous in origin, had on the cancer patient or his tumor. The theory advanced by Hodenpyl in regard to the action of the fluid in his apparently spontaneously cured patient, was along the lines of other theories of immunity. This theory was that the patient in this case must have manufactured within herself some substance in the nature of an antibody, which was detrimental to the growth of her cancer and which eventually caused its retrogression. Subsequent autopsy in this case, however, showed that the patient eventually died of metastatic cancer not demonstrable during life. Weil, in a subsequent report of the analyses of Hodenpyl's fluid and fluids from other cancerous and non-cancerous cases, was unable to find, by any biologic or chemical test, any antibody or any specific substance in any of these fluids whereby they could be differentiated from one another. The nature of the action of Hodenpyl's fluid on cancer remains, therefore, unexplained. Hodenpyl believed that in his case there was produced a specific antibody for the cancer cell. Whether that be true or not, we know of many cases in which the patient resists the inroads of cancer for many years, and MacKay[2] in England has collected from the literature nearly fifty authentic cases of more or less complete spontaneous retrogression of cancerous growths. Spontaneous retrogressions of various tumors, including cancer, are known to occur, but the process by which this is brought about has not been determined. We can conceive, however, of the production in the body of some substance which acts on the tissues surrounding the tumor so that the stroma necessary to the sustenance of the tumor is made to degenerate, possibly by the development of a connective tissue barrier which cuts off its nutrition, or of a substance which acts as an antibody against the cancer cell or its toxins. It is, therefore, not unreasonable to suppose that the cancer patient, as well as the patient with an infection, can manufacture substances which tend to retard the cancerous process. With this theory as a working basis the present clinical experiments were undertaken.

The cancer patients of one group (the group which comprises the main part of this study) were treated with ascitic fluids obtained from patients with cancer in all stages of the disease. An effort has been made to obtain, as far as possible, ascitic fluids from patients resistant to their disease, with the idea that the amount of antibodies per cubic centimeter of fluid in these cases would be larger than in very active or non-resistant cases.

In a second and smaller group, cancer patients were treated with the various normal and abnormal body fluids, other than cancerous fluids, in order to determine their effect on the cancer patient and his disease. In a third group, untreated patients were watched coincidentally for the purpose of comparison with the series of patients treated with the cancerous and the non-cancerous fluids. With these two classes of controls a satisfactory check could be made on the patients treated by the cancerous fluids. The fluids used in the second series were:

1. Normal blood-serum.
2. Hydrocele fluid.
3. Spermatocele fluid.
4. Ascitic fluid from a case of alcohol cirrhosis.
5. Ascitic fluid from a case of incompetent heart.
6. Pleuritic transudate resulting from broken compensation.
7. Pleuritic transudate: non-tuberculous in origin.

Bile, cerebrospinal fluid and chyle have not been used.

None of these fluids, except spermatocele fluid, which exerted a noticeable stimulant effect, especially on females, has had any beneficial effect on the cancer patient or his cancer so far as observed.

A series of ten patients (later treated with the cancerous fluids) was given a trial of from two weeks to one month with these non-cancerous fluids. The latter were given mostly in large doses so as to get all the effect possible. No local symptoms in the tumors, such as were witnessed with the cancerous fluids, or constitutional reactions, were witnessed even with doses of 60 c.c. of any of these fluids. Normal blood-serum was given only in small doses of from 1 to 5 c.c., and gave none of the phenomena of anaphylaxis. In one or two cases a slight rise of temperature was recorded after the largest doses of fluids and also after a 5 c.c. dose of blood-serum. Leukocyte counts were not recorded in this series. It is conceivable that a continuance of the largest doses over a longer period might produce some

1. Med. Rec., New York, Feb. 26, 1910, p. 359.

2. Brit. Med. Jour., July 20, 1907. Also Wells, H. G.: The Resistance of the Human Body to Cancer, THE JOURNAL A. M. A., May 29, 1909, p. 1731.

constitutional reaction. As no beneficial results were seen in the cancer patient or his tumor after one month, this series was discontinued, as it seemed reasonable to suppose that the time was sufficient for the appearance of some favorable or unfavorable symptoms.

For the main part of this work the following cancerous fluids have been used (they are designated in this paper by the patient's last initial):

1. "T" fluid, obtained from Mrs. G. M. T., aged 79, whose mother died of cancer; five brothers died of tuberculosis. Patient had had many febrile diseases. Four months ago she had gastric distress, pains later, vomiting with gradual increase in size of abdomen; much loss of weight. On examination, patient showed cachexia; glands above clavicle, in axillæ and groins; abdomen slightly distended, mass 3 by 4.5 cm. in epigastrium, tender, shifting dulness in flank. Patient was tapped; 3.580 c.c. alkaline fluid obtained, sp. gr. 1,011; albumin 1.6 per cent; culture, negative; slight tinge of bile. Small lymphocytes 78 per cent.; large lymphocytes 16 per cent.; polynuclears 5 per cent. Wassermann reaction, negative. Clinical diagnosis, cancer of liver.

This fluid was the most effective in producing sloughing of tumor masses. Whether this was due to the small content of bile we are unable to state. (The later use of a non-cancerous fluid with large bile content produced practically no sloughing.)

2. "K" fluid. obtained from M. K., aged 53, who had two brothers; one sister died of tuberculosis. For three months, patient had had pain in abdomen, vomiting, loss of weight (25 pounds) and increase in size of abdomen. On examination, liver edge was not felt; abdomen was tense; fluid wave present; edema of legs up to knees. After tapping, nodular masses size of hen's egg and larger were felt all over the abdomen; large mass in left pelvis. By tapping 4,000 c.c. clear dark-yellow fluid were obtained; culture, negative; Wassermann, negative. Clinical diagnosis, general abdominal cancer, active.

This fluid has been practically inert.

3. "L" fluid, obtained from Mrs. K. L., aged 28, who was operated on five years ago for malignant disease of right ovary. May, 1910, patient was in fair flesh and general good condition, but had to be tapped every four weeks. There was a hard, lobulated, slightly tender mass size of grapefruit in right lower quadrant. Fluid was pale yellow; sp. gr. 1,010. Culture, negative. Wassermann, negative. Clinical and pathologic diagnosis, malignant papilloma of right ovary.

This fluid has been valuable in relieving symptoms and retarding the growth of several cases.

4. "P" fluid, obtained from Miss E. P., aged 31, who had an operation in June, 1901, for abscess of right ovary; 1908, repair of hernia in scar. At this time a small mass in right pelvis was felt but was undisturbed. May, 1909, the abdomen began to swell again. July, 1909, the malignant ovarian mass was partially removed; patient made a good recovery. Patient was then in excellent general physical condition; in good flesh, up and about everywhere, but had to be tapped every four to six weeks. Fluid was dark yellow, slightly viscid; sp. gr. 1,024; culture, negative; Wassermann, negative. Clinical and pathologic diagnosis, malignant papilloma of ovary.

This fluid is from the most resistant type of case and produces marked reactions. It has been especially effective in several uterine cases in checking hemorrhage, and in other cases in stopping pain and has seemed to produce more retardation than any other fluid used.

5. "H" fluid, obtained from Mrs. H. H., aged 58, who had, for several months in 1905, right-sided abdominal pain with gradual increase in size of abdomen. Operation in November, 1905, revealed a right-sided malignant ovarian mass which was partially removed. Patient made an uneventful recovery, gained weight and seemed in perfect health until about April, 1910, when she began to have symptoms of increasing constipation, but no pain, loss of weight or change in size of abdomen. Physical examination was negative. At operation, May 17, 1910, recurrent papillomatous mass was found with a little free brownish fluid. Fluid was brownish, watery, sp. gr. 1,010; slight blood content; albumin, 2 per cent; culture, negative; Wassermann, negative.

This fluid seems to have had a decided retarding effect. Not enough was obtained, however, to last more than for two months' treatment. But it was from one of the most resistant types of cases and probably had some specific effect.

TECHNIC

The peritoneal cavity was in each instance tapped under sterile precautions and the fluid drawn off into a sterile bottle and put on ice until used. No standardization was attempted and no preservative was added. The following precautions were taken before the fluids were used: 1. A culture was taken to prove them free from bacteria. 2. A negative Wassermann reaction was required from the patient from whom the fluid was drawn. 3. A series of injections was given to cancer mice to prove that the injections were in no way harmful to administer to human beings. Daily injections of 5 minims of each fluid were given subcutaneously to different series of cancer mice. These were large doses for mice. If no harm came to the mice, and none did, except in three instances, which were due either to a fault in the technic of injection, or to a contamination of the fluid with bacteria, which occurred in one case, the fluid was then used on human beings. These precautions were considered necessary before the institution of this form of treatment, for we were dealing with an entirely new experimental fluid of unknown potency and content, and every safeguard should be used before subjecting even the hopeless cancer patients to its influence.

The fluid had no apparent effect on the growth of mouse tumors.

The patients treated all had inoperable growths, either primarily so or because of recurrence or metastases. All grades of the process have been treated. No case was refused because the process was too extensive, for we wished to get our data from unselected cases; hence, the work has been largely with decidedly unfavorable cases. The patients have been treated as out-patients, reporting three times a week for injections. Fourteen of the cases have been treated as house patients, with large daily injections, for periods of one to two weeks at a time. The clinical diagnosis was unquestionably cancer in every case. In all but three this was confirmed microscopically. In all, forty-five cases have been treated.

The injections were given in four different ways:

1. Subcutaneously in the skin of the abdomen or breast, rather removed from the local disease, in large doses.
2. Subcutaneously, as near the tumor as possible, in large doses.
3. Into the substance or base of the tumor in small doses.
4. Remote from the tumor in small doses.

The dose varied from 5 minims, for the small dose, to 50 c.c. for the large dose; the usual dose, which was given regularly in most cases, without producing either local or constitutional reaction was 15 c.c.

Patients varied noticeably in susceptibility, some getting constitutional reaction with 10 c.c., while others got no reaction with 50 c.c. This variation seemed to be due more often, however, to the nature of the fluid than to the patient. Reaction at the point of inoculation varied from none at all to a temporary redness, soreness and even induration, lasting from twelve to twenty-four hours. In obese patients the reaction was usually marked. No abscesses ever developed. Local hyperemia and some swelling practically always occurred in the tumor itself immediately following the injection, and

lasted a few hours, whether the injection was at a distance from, or near to, or into the tumor. It seems to me that this one fact speaks more clearly than anything else for the specificity of these fluids. The fact that a definite local reaction in the tumor itself can be produced within a few hours after injection by a substance injected at a distance from the local disease, indicates strongly the existence of some specific substance in these fluids, which acts on the tumors themselves. The exact way in which this action is brought about and the nature of the substance causing the effect, we have not been able to determine. It is hoped that further biochemical investigation may be able to throw some light on this important point. Constitutional symptoms varied from slight headache to general malaise, chills and fever, nausea and, rarely, vomiting. The temperature seldom went above 102 F. in any case, although large doses occasionally produced a higher rise. A temporary leukocytosis developed in the cases with the most marked reactions. Urinary analyses showed in no case any evidence of an acute nephritic condition being started up. Acute nephritic conditions have been reported by Beebe in New York, and a routine urinary examination should be made as a precaution in all cases under this form of treatment. The patients were started on 3 to 5 c.c. and increased at each injection up to 50 c.c., if well borne, except in those cases in which it was the intention to keep the dose small.

The following histories give the course of each case in detail.[3] Some patients reported very irregularly, while others were allowed to rest from treatment from time to time in order to observe the effect, after a certain number of doses.

CASE 1.—Mr. C. S., aged 61, had a growth which appeared one year previous to examination, as a small dull-red lump the size of a marble over mid-sternum, which was cauterized repeatedly, but grew steadily larger, and ulcerated, with much pain. At examination, patient was a large-framed, nervous old man, with ruddy color. Over mid-sternum was an orange-sized, fungoid, ulcerated, protruding mass with depressed center and cauliflower edges. *X*-ray showed extensive involvement of sternum. Pathologic diagnosis was cancer. February 21 to March 29, 1910, Coley serum was given up to 3 minims at a dose, with no improvement or change; much pain. April 1, 1910, patient was started on "L" fluid (cancer of ovary of five years' duration) and received 25 c.c. every other day till April 11, then 50 c.c. daily up to June 1, 1910. The first five doses caused softening of the edges and increase in discharge and later a marked filling up of the ulcer in the center took place so that bone could no longer be felt at the bottom as before, and no increase in size of the tumor was noted. The patient had to take large doses of opium, however, to control the pain, which was present all the time. A large gland developed in the right axilla after about two months, and the patient very slowly became more feeble; but the original tumor seemed to have been checked in its growth and to have remained at a standstill for the three months the patient was under treatment. June 1, 1910, the patient contracted a severe "cold" and has not reported since.

In this case retardation seemed to have been effected for nearly three months by large doses of fluid from a fairly resistant type of case.

CASE 3.—Mr. W. T., aged 52, had cancer of upper and lower jaw; submaxillary gland on the left was the size of a marble. Two similar masses along ramus of jaw on left and smaller nodule above one molar tooth on upper jaw. Clinical diagnosis was cancer. March 17 to 25, three doses of 2 c.c. hydrocele fluid were given, with slight increase in size of nodules. March 29 to April 23, ten doses of 25 c.c. of "L" fluid (cancer of ovary, five years' duration) were given; injections were always followed by local hyperemia in tumor, sometimes slight bleeding of gums and marked constitutional reaction with chill, headache and increase in pain. "T" fluid (cancer of liver with bile) was tried but produced such marked constitutional reaction and swelling of neck that it was stopped, and from April 25 to May 23, thirteen injections of "P" fluid (cancer of ovary, nine years' duration), were given with rapid increase in size of tumor of jaw, which on May 9 pointed and broke, discharging small bits of cancer tissue. May 23 treatment was discontinued at patient's request, as he was having much pain.

In this case neither hydrocele nor the two fluids from the most resistant cases accomplished anything at all, but rather seemed to hasten the rapidity of growth. The patient gradually grew weaker and died Sept. 1, 1910, with no change for the better.

CASE 5.—M. D., a man aged 58, had an epithelioma of the leg excised in 1908. There was recurrence in the parotid within eight months. Pathologic diagnosis, cancer; rapid growth occurred after several partial removals; ulcerated. The patient was treated for four months with large doses of *x*-ray. Face swollen, lips protruding, drooling; large, red, deep ulcerated area replaced whole parotid region and right upper neck and cheek. Abundant discharge. April 9, 1900, 15 c.c. "L" fluid (cancer ovary, five years' duration), followed by marked local reaction in tumor evidenced by acute swelling, increase in discharge and excessive pain. April 21, patient entered ward and kept under the influence of morphin while nine injections of 50 c.c. each of "L" fluid were given, resulting in a marked increase in the discharge of serum and tissue from the ulcer, but no improvement in the condition. In this patient pain was so excessive that treatment could not be continued. It is suspected that the previous use of such large doses of *x*-ray was an influencing factor. The patient declined rapidly and died six days after the last treatment. This was an extensive, rapidly-growing case and the patient received absolutely no benefit from the serum except the increased discharge.

CASE 6.—Mrs. N. G., aged 56, two years ago had a lump in the right axilla opened and removed; the wound never healed. Examination showed an indurated, puckered scar in right axilla, with red edges and sinus. Piece removed proved to be cancer. The breast showed no lumps or indurated areas. There were two hard glands the size of English walnuts above right clavicle at edge of sternomastoid. From April 12 to May 11, thirteen injections of "K" fluid (carcinomatosis of abdomen) were given, with cessation of slight discharge from sinus, and occasional very painful heavy condition of the breast following the injections. March 14, 1 c.c. "T" (cancer of liver with bile) fluid was injected directly into most indurated part of tumor, with resulting renewal of discharge from sinus and slight increase in size of tumor mass. This was a slow-growing condition and practically no change was noticed except those relating to the discharge. The glands in the neck, however, seemed to have grown considerably smaller. Patient was still under treatment at time of this report. There was practically no change from April to August 1, when patient stopped coming for a month. She was seen Sept. 20, 1910, when the mass in the axilla had increased 1 cm. in size; the corresponding arm was much swollen and the patient had lost considerable weight. In this case retardation lasted nearly four months. Jan. 1, 1911, patient was much emaciated and had involvement of lungs.

CASE 9.—Mr. C. H. A., aged 70, had an infiltrated, ulcerated epithelioma of right jaw removed October, 1909. November, 1909, dissection of neck was done, with removal of internal jugular vein for rapid recurrence. Examination April 16, 1910, showed portion of lower right jaw missing. There was a small pea-sized ulceration at mid-scar, slightly nodular along scar; a more prominent nodule just under the ear. Pathologic diagnosis was cancer. General condition was excellent. April 16 to May 28, sixteen doses of 5 minims each "T" fluid were injected directly into various nodules in scar, with marked alleviation of pain and slight softening of nodules, and until May 28 the patient showed marked improvement; the recurrence, which had been very rapid before, seemed to

3. On account of the length and number of the case reports not all of them have been included in the paper as printed in THE JOURNAL, but all will be found in the author's reprints. Those selected here illustrate the various phases of the subject.

be completely held in abeyance, but on May 28 it was found that since May 23 a hard mass had developed under the molar in the right upper jaw. This case was evidently retarded for over a month by the use of "T" fluid (cancer of liver with bile), but suddenly, as in Case 8, flared up after a considerable period of quiescence. Patient stopped treatment June 3, and died July 7, 1910.

CASE 11.—M. F. W., aged 34, had a growth which appeared November, 1909, as a lump the size of a small marble under skin on right side of neck. January, 1910, the lump became ulcerated. No treatment was given. Examination showed orange-sized, hard, slightly red, tender mass under right parotid, with three ulcerated areas exuding pus. Ulcers were not continuous. Breath was foul. Patient was unable to open mouth, which was sore inside. Pathologic diagnosis was cancer. From April 21 to May 31, eighteen injections were given, averaging 25 c.c. each, of "T" fluid (cancer of liver with bile). The first injection of 3 c.c. caused extensive sloughing and moderate hemorrhage. The next three injections were followed by increase in pain also. After six injections the growth was breaking down fast and after ten, large pieces of tumor tissue dropped away. This extensive sloughing plus a mild injection throughout the mass caused much pain, sore throat and a very disgusting condition. Daily dressings were done by a district nurse, but even they did not control the profuse, bloody, very foul discharge. Patient was getting very feeble. The tumor had increased about double in size up to one week prior to report, since when it remained stationary. In this case the fluid undoubtedly caused a more marked and rapid breaking down of the tumor-cells. A fluid with small content of bile was used. The patient discontinued treatment June 7 and died June 14, 1910, without any relief.

This is the case in which the most marked sloughing was produced.

CASE 13.—Miss E. P., aged 31, was the patient from whom fluid "P" was taken. Operation was performed in 1901; drainage of abscess (?) of ovary, probably malignant. In 1908 a second operation was done: repair of hernia in scar. Small mass in the right lower quadrant of abdomen was not removed. A third operation was performed in 1909: partial removal of malignant right ovarian mass. Pathologic diagnosis was papillary adenoma. April 22, 1910, patient was in excellent general condition; had had no loss of weight; in fact, had had some gain lately. Color was good. Patient was about everywhere; she suffered no inconvenience except that she had to be tapped every four to six weeks. There were bilateral, grapefruit-sized masses in each lower quadrant. April 25 to May 9, ten injections of 50 c.c. each of her own fluid were given subcutaneously, with no reaction of any kind. These were daily injections. After leaving the hospital patient had biweekly injections of her own fluid, and remained in excellent condition; tappings were more frequent and the mass in the pelvis seemed more pedunculated and smaller. Further operation for removal was advised. Patient was operated on in October, 1910, and mass practically completely removed. Patient had had no return of tumor or fluid by Jan. 1, 1911, and seemed in perfect health.

This was an interesting case, in which the patient was apparently benefited by reinjections of her own fluid. This case seems to illustrate the benefit of giving of autogenous serum.

CASE 14.—Mr. F. C., aged 60, for two months had had a swelling of the gum of the right lower jaw. Teeth were removed without relief. Examination showed swollen, indurated, nodular, slightly ulcerated gum of right lower jaw from angle to median line, pushing the lip forward, with marble-sized glands under jaw. Patient's general condition was good. May 13, 1910, 15 c.c. "P" fluid (cancer of ovary, nine years' duration) were given, followed by no symptoms. May 18, a loose piece of the cancer tumor was excised and transplanted under skin of left breast. Pathologic diagnosis was epithelioma. May 31, no "take" had been effected and patient was again started on the fluid. Tumor was increasing rapidly.

This transplantation experiment was tried in the hope that if the transplant could be made to grow it might retard, as Gay has found in mice, the original tumor. Patient reported irregularly up to August 1, but was gradually losing strength and the growth increasing in size.

CASE 15.—Mrs. I. M. Q., aged 34, had a growth which appeared in the left breast, just outside the nipple, three and one-half years previous to admission, as a lump the size of an egg. Nine months later patient had her last child, but there was no milk in left breast. The tumor broke through skin one year previous to admission but never discharged. No treatment was given. Examination showed a tumor the size of a fist, hard and nodular, with dry ulcerated area the size of a quarter in the left lower quadrant of the left breast. There were many large glands in axilla and above both clavicles; a small septic area at the top of the mass about to break, which did break after first injection. Patient had doses of 20 c.c. "L" fluid (cancer of ovary, five years' duration) with marked reaction at site of injection in the form of a hard, tender lump and heavy breast, with much pain after many of the injections. Patient's general physical condition was excellent at the start. May 10, 1910, the breast had become much softer under treatment and the ulcerated areas discharged more profusely. Since August 1 patient had had but one injection and the breast meanwhile became much harder again and the ulcerated areas dried up. The fluid evidently had a specific action in this case, as shown by the marked softening while under treatment. It was a slow-growing case and little change was noticed other than the softening during the four months of treatment. Jan. 1, 1911, patient was still alive but had metastasis in right tonsil and was beginning to fail and to show evidences of metastasis in the brain. Patient died Jan. 13, 1911, with typical symptoms of brain tumor.

CASE 17.—Mrs. M. N., aged 42, six years prior to admission had a lump appear in the left breast, which was "drawn" by a quack. Three years later it returned. Quack treatment was continued. Six months prior to admission another lump appeared in the right breast. Examination showed almost complete solidification of both axillæ, and both sets of pectorals with cancer nodules; both breasts were ulcerated and dry; the left the size of one's palm, the right the size of a half dollar. Patient was in excellent general health; color very good. May 14, 1910, to May 31, patient received five injections "P" fluid (cancer of ovary, nine years' duration) with decided relief from pain; slight constitutional reaction with first two doses. There was no increase in discharge. The fluid acted as a tonic. The ulcers cleaned up materially. The patient's health was still good after four months' treatment. This was a slow-growing process, but seemed to have been benefited. Patient reported Jan. 1, 1911, that she was well except for "rheumatism," and that there then had been no change in her breast at all.

CASE 19.—Mrs. L. J., aged 48, a widow many years, had had two children and two miscarriages; there had been much laceration. Three months prior to admission leukorrhea appeared, which became foul, and one month later pain in back and vagina developed. Examination showed foul discharge; vaginal vault extensively indurated; cervix nodular, hard, fissured. Patient's general condition and color were excellent. May 5, 1910, cautery and curettage of cancer of cervix was done. Pathologic diagnosis was cancer. Treatment was started May 23, 1910. Patient was very obese and had several severe local reactions at site of injection, but immediately after treatment was instituted the flowing and pain ceased and the discharge at first became increased and later decreased. Sept. 27, 1910, patient was still in excellent condition, had no pain, but considerable discharge from a process which was slowly enlarging and extending to rectum. In October, 1910, patient had suppression of urine from blocking of both ureters. She entered hospital, had ureters catheterized, but was discharged against advice, to be taken home by sister to die at home. She has been lost track of.

The most noticeable effect of treatment in this case was the cessation of pain and hemorrhage.

CASE 27.—Mrs. E. W., aged 49, widow, had a "lump" in the front of her neck for ten years. Operation was performed in 1908 for carcinoma of thyroid. Pathologic report was cancer. There was almost immediate recurrence. On examination was found to be short and stout; general condition good; no cachexia. There was a hard, purplish, indurated, nodular mass involving whole thyroid region, slightly more prominent on left, reaching to below sternal notch and up to right parotid

and right tonsil, with many small glands surrounding; a very extensive process. There was a slight numbness of right arm; no pain. July 5 to Sept. 30, 1910, patient received "P" fluid. After the third injection the tumor mass became much softer, and after two more injections the purplish color disappeared and the skin took on an almost healthy color. It was impossible to give this patient over 10 c.c. doses, as she got violent constitutional reactions from larger ones. She left off treatment for one month and during that time the old tense purplish color came back and the stony hardness of the mass. Considering the rapidity of growth before treatment it seems certain that the fluid had caused some retardation in this case.

CASE 31.—Mrs. C. B., aged 56, widow, had always been well until January, 1910, when she had pain when she sat down. The coccyx was removed and hypernephroma, extending to sacro-iliac joint on left, found and confirmed by pathologic examination. Five weeks prior to admission a lump appeared in the buttock. There was no pain, but discomfort on sitting. Examination showed a large-framed, obese, red-nosed woman, with poor superficial circulation, acne rosacea of face, and red scar 1½ inches long at base of sacrum; no nodules in scar. There was a hard, firm, slightly lobulated mass in right buttock, apparently springing from deep structures; no tenderness; rather tense. Pelvic examination was negative. A mass 4 by 6 inches was indefinitely determined. July 5, 1910, to Sept. 30, 1910, 15 c.c. average doses of "P" fluid were given with very slow growth of tumor to 8 by 8 inches, but considerable softening in tumor. This patient had marked local reactions after injections and numerous constitutional reactions, so that fluid could not be pushed to a high dosage. The only noticeable effect was the very slight softening in the mass following injections. The process later was growing more rapidly. From Oct. 1, 1910, to Jan. 1, 1911, the tumor grew only very slowly. At the time of this report it measured 9 by 9 inches, but was slightly harder. The patient was able to take 50 c.c. at a dose of the fluid and had no pain. The patient's condition was excellent.

This case proved to be very interesting, and a condition which gave no promise for relief has been greatly retarded.

CASE 36.—Mr. J. N. W., aged 56, had a growth which appeared twenty years ago as a small, hard pimple back of left ear and broke out and healed up off and on for five years; fifteen years ago patient had it "drawn" by a "quack." Operation was performed August, 1909. The epithelioma was excised and a plastic operation done on the ear. The growth recurred in September, 1909. The patient had *x*-ray irregularly afterward; had Coley serum for five months with gradual slow increase in ulceration under unsettled diagnosis. Pathologic report finally settled the lesion as epithelioma. Examination showed a spare, "wiry" man in excellent health and good color; lobule of left ear absent; crescentic ulceration around base of ear and partially healed ulceration nearly surrounding whole ear; slight ptosis of left lower eyelid. July 16 to September 30, patient received doses of 10 c.c. each of "P" fluid, with increased discharge from ulcerated surfaces at first, followed by slow cleaning up of ulceration, which then looked much cleaner and more healthy than before. General health was still excellent. In October all of the ulcers above the ear were hard and covered with skin. In November ulceration started in below the lobe of the ear and has been growing slowly ever since, and the last four or five injections had seemed to hurry up the destructive process so that on Dec. 31, 1910, the patient was advised to omit treatment for a month. Facial paralysis became complete on left side. Jan. 20, 1911, process had not spread further and there were islands of scar tissue present in several places. February 1, more scar tissue. Considerable reparative process going on.

CASE 37.—Mr. A. S., aged 58, had syphilis in 1879; was treated off and on for ten years with no resulting symptoms. One year prior to admission a small crust formed on the left side of the neck back of and below the ear; there was no ulceration until six months prior to admission, since which time it ulcerated and gradually spread and grew deeper. There was some pain. On examination the patient appeared well developed and nourished; a slightly pale man, and husky voice. There were old brownish scars over the legs and back. On the left side of the neck, back of and below ear, was an ulcer ½ to 1 inch deep, with ragged edges, but fairly clean, 2½ by 3½ inches across; edges not much undermined. The sternomastoid muscle and several small vessels and nerves were exposed in the bottom of the wound. There were small whitish epitheliomatous-looking patches in bottom of ulcer. Pathologic report was epithelioma, without doubt. July 16 to September 30, the patient received *x*-ray and "P" fluid in small doses twice a week with no change for the better, but with gradual deepening of the ulcer under the ear. The ulcer was clean, no hemorrhage. Complete facial paralysis on left side slowly developed and patient began to look a little paler, and was getting weaker. This patient had normal blood-serum for one month before the "P" fluid was started. No effects were noticed constitutionally or locally from biweekly injections of 1 c.c. blood-serum and certainly the "P" fluid, in small doses, has had no effect. During November and December, 1910, large doses, up to 50 c.c. were tried, but the process went swiftly on, causing an almost complete anatomic dissection of the neck down to the vertebral column. The patient's condition, however, did not suffer much and it seems as if the large doses of fluid had stimulated and nourished him considerably.

CASE 39.—Mrs. A. C. C., aged 41, had had no children or miscarriages. For five months prior to admission there was a gradually increasing vaginal discharge, not especially foul. The catamenia were not much affected. Three weeks prior to admission patient began to be very constipated and abdomen became bloated with gas. She vomited repeatedly, and had very little relief from enemas. She noticed that the uterus was lower down than normally. The patient was a small, dark-skinned, very thin, sallow woman, with pulse poor, abdomen distended, visible peristalsis, no masses. On vaginal examination the cervix was found low, hard, and with an ulcer with ragged, raised edges; the uterus was increased in size and almost completely obstructed the rectum. The patient was relieved from this attack of obstruction by one week in hospital; she went out in very poor condition. July 29, 1910, to September 30, biweekly doses of "P" fluid were given with several severe reactions, but rapid improvement in general condition, lessening in discharge and pains and gain in weight. This patient was started on four doses of 5 c.c. each of spermatocele fluid, which produced a marked stimulating effect. The cancer was slowly growing and ulcerating more rapidly, but the general condition had improved from almost *in extremis* to be very good indeed. From September to October 30, the condition remained about the same but the tumor continued to grow until the mass almost completely filled the pelvis, shutting off the rectum and nearly shutting off the bladder. Patient's strength continued good and she had little pain. The serum has been of very doubtful benefit in this case, although it seems as if the stimulating effect of large doses may have kept up her general physical condition.

CASE 40.—Mr. C. H. M., aged 59, several members of whose family died of tuberculosis, had fever and ague at 18. For thirty years patient had a tumor and a sore on the right side of neck posteriorly, which ulcerated fifteen years ago, was excised once, and "drawn" six or seven times. His voice was hoarse since October, 1909. Examination showed a tall, spare, husky-voiced man, with good color; head slightly bent to left; sternomastoid on right tense. Over an area the size of a silver dollar was a hard indurated-edged ulcer with fairly clean base and granulations. Several surrounding nodules and the tissues around for 1 or 2 inches were hard and contracted, most of which seemed to be scar tissue, but some of which was typically cancerous. Examination of the larynx showed right vocal cord in cadaveric position, and paralysis of right recurrent laryngeal nerve, from presence of the disease, probably. July 27, 1910, to August 3, as house patient, he received large daily doses of "P" fluid, with severe constitutional reaction after the last two doses, but practically no change in the local condition, except, perhaps, a little softening of the edges, but with continued relief from the pain in the brachial plexus which had been complained of. August 3 to September 30, 25 c.c. of fluid were given once a week with little change, except that the ulcer seemed cleaner. This had been a very slow-growing process, and aside from the permanent relief

from pain showed no change after two months' treatment. On Jan. 1, 1911, patient was admitted to the hospital and the ulcer curetted and skin grafted, with relief of pain.

CASE 43.—Mr. R. W., aged 66, had always been well until two or three years prior to admission, when a lump appeared on the side of the neck and grew slowly. It was excised several times; excision with a plastic operation was done June 1, 1910. Since then patient had a recurrence of what examination showed to be epithelioma, and much pain, which required a grain of morphin a day to control. June 23 to July 30, 5 c.c. doses of "P" fluid were given every day, with complete relief from pain, but with increase in discharge and spreading of process. Letter from wife September 30 stated that patient had not had the serum for nearly six weeks; he had gradually failed in strength of body and mind and was expected to live only a few weeks. The process had spread all over the jaw, several sinuses led into the mouth and the patient was in a pitiful condition. The only benefit in this case, therefore, was complete relief from pain while under the serum treatment.

CASE 44.—Miss F. H. S., aged 50, had an operation June, 1909, for carcinoma of left breast, three months after appearance of a lump near the nipple. There was recurrence in the scar after nine months. Examination showed a strong, large-framed woman in excellent health. There was a ¾-inch linear, red recurrence in mid-scar; no pain; marble-sized nodule, with several pea-sized nodules in skin of chest wall under axilla. The arm had been swollen nearly twice its normal size since the operation. Aug. 18, 1910, to Sept. 30, 1910, the patient received 5 c.c. doses of "P" fluid twice a week, with no increase in size of nodules during this time and a noticeable decrease in the purplish-red color of skin over nodules. The swelling of the arm was controlled by massage. This case was taken early and ought to have been a favorable one for retardation. Up to Nov. 15, 1910, the disease seemed to be held completely at a standstill, but afterward there was more pain and a very slight increase in the size of the nodules. The general health, however, remained excellent.

CASE 45.—Mr. H. T., aged 65, Dec. 29, 1909, had an eyebrow excised with a plastic operation for epithelioma. There was recurrence in right side of neck in May, 1910. At time of admission patient had small, hard glands under right jaw and a mass the size of a pigeon's egg under the symphysis of the jaw. The breath was foul. There was no involvement of mouth. September 20 and 27, "L" fluid was administered, with some softening in mass. Fluids were continued to Oct. 25, 1910, when patient evidently had an infection of the diseased area, with swelling, pain and redness. This subsided under poultices, and patient was admitted to hospital in November and the greater part of the mass removed. He made a good recovery. Patient remained in this condition for one month, with no increase in size of remaining nodule. Jan. 15, 1911, there was a second flare-up of the process and rapid increase in size of mass, with breaking down in several places.

This was another jaw case in which the process seemed to have been checked for a time, but which later developed with lightning-like rapidity. This series makes one doubt the beneficial influence of the ascitic fluids in jaw cases. They even seem to be harmful in some cases.

Definite results witnessed in this series of cases are as follows:

In five cases there was a decrease in, or absolute abolition of, the pain previously complained of. These were cases in which maximum doses were given (Cases 19, 22, 33, 40, 43).

In three cases there was a decided increase in the discharge from an ulcerated surface and a breaking down of cancerous tissue, considerable portions of which sloughed away entirely—enough to cause moderate hemorrhage. In no case was a fatal or even dangerous hemorrhage produced. Moderate increase in the discharge from an ulcerated or broken-down surface has been noticed in practically every patient treated. This in some cases was only temporary, but was followed later by noticeable cleaning up in the ulcer and more healthy granulations.

Cessation of bleeding in several cases of uterine cancer was seen, especially in Cases 16 and 19.

Increase in pain was experienced in Cases 12 and 5, the latter patient, who had been having very large doses of *x*-ray previous to injection, had excessive pain even with very small doses of the fluid. In Case 37, however, the patient also had large doses of *x*-ray with his treatment, but had no increase in pain.

There was apparent retardation of the growth in eight cases for periods of two to five months, and in three others for a period of over one month. These tumors were growing very rapidly when started on the serum, and, when compared with other cases in this series, as well as in the control series, it seems justifiable to state that they have actually been retarded. These are Cases 14, 8, 9, 12, 4, 6, 13, 22, 26, 27, 31.

Physical as well as psychic effects of this treatment are often marked. Twelve patients have remained in excellent general physical condition, gaining strength and weight in spite of a slowly growing process, and this has been seemingly due to the stimulating effect of the fluid. This fact may be of some importance in relation to Leary's treatment of marasmic infants with ascitic fluid.[4]

On the other hand, in no case was there actual shrinking in the size of the tumor, and from the rapid increase in the size in two cases (3 and 12), there seems to have been a decided increase in the rate of growth of the tumor; due apparently to the use of the fluid.

There was no constant effect on so-called metastatic rheumatic pains.

In no instance was any marked harm done. One dose of a fluid, which "went septic," previous to being administered to several patients, caused marked constitutional symptoms which, however, passed off in twenty-four to forty-eight hours and left no ill effects so far as could be observed, the reaction being similar to that experienced with Coley serum.

The number of fluids available from resistant cases has not been large so that it cannot be positively stated that they always have a more specific action on the cancer than the fluids from less resistant cases, but it has been noted that local and constitutional reaction has occurred more often from the use of the fluids from resistant cases, and from this we are led to believe that their action is more specific, and hence beneficial.

CONCLUSIONS

A trial of seven months' duration has now been made with a series of forty-five cases, comprising variety enough both in the fluids used and in the type of cancer treated to warrant the following statements in conclusion, based on a careful analysis of the results in this series.

1. The various transudates and exudates of the body, cancerous and non-cancerous, have no effect in retarding the growth of cancer in mice.

2. The use of cancerous ascitic fluid from patients in the active or even moderately resistant stages of the disease has no permanent effect in preventing or checking the growths of cancer, or permanently benefiting the cancer patient.

3. The other non-cancerous body fluids are even more inert.

4. Boston Med. and Surg. Jour., Aug. 18, 1910, p. 283.

4. Temporary beneficial effects may be noticed for periods of one to five months, but the course of the disease is in no way permanently retarded.

5. Temporary relief from pain, especially in uterine cases, and in other cases in which large doses can be given, and retardation of the growth for periods varying from one to five months, may be expected in a small per cent. of the cases.

6. Noticeable benefit in the general physical condition has resulted in one patient with cancer of the ovary by the injection of her own fluid.

APPENDIX

Since the completion of this report on the first forty-five cases, Oct. 1, 1910, twenty additional patients have been treated, with practically the same results as in the reported cases, which have confirmed our stated conclusions.

The information obtained from these twenty additional cases, and the more complete following up of the forty-five original cases, emphasized the following points:

1. Great symptomatic relief can be obtained in a good percentage of the patients treated, evidenced by relief from pain and improvement in nutrition and general physical condition.

2. Retardation is noticeable and prolonged from one to six months in many cases.

3. Ascitic fluids are liable to hasten the process in practically all mouth and jaw cases.

4. This work, together with the use of the *x*-ray in other cases, and curetting and skin-grafting sluggish epitheliomatous ulcers, has impressed me with the fact that much can be done for the relief of the seemingly hopeless inoperable cancer patient. While cures and benefit cannot be expected in every case, in spite of the fact that no cures have been accomplished, the work has emphasized the fact that much symptomatic relief can be given to suitable individual cases.

527 Beacon Street.

CHEMICAL DERMATITIS FROM INCOMPATIBLE EXTERNAL APPLICATIONS

A. M. MENDENHALL, M.D.
IOWA CITY, IOWA

It is a well-known fact that dermatitis is frequently caused by internal medication. With somewhat less frequency do we see a case of dermatitis caused by a combination of internal medication with a wrongly chosen external application—as for example, iodids internally and calomel dusting powders externally. Still more rarely do we see a case of dermatitis caused by chemically incompatible drugs used externally; and it is for this reason that I consider the following case of sufficient interest to be reported:

History.—A patient, male, came to me suffering from a typical case of impetigo contagiosa. There were eight or ten lesions irregularly distributed over an area about 8 cm. in diameter in the left anterior cervical region. Ammoniated mercury ointment was ordered.

Dermatitis.—The patient returned the following day to say that shortly after the first application of the ointment the area began to burn and sting severely. For several hours he underwent a great deal of discomfort. On examination it was found that a very large area, probably from 15 to 20 cm. in diameter, was highly inflamed. It was of a diffuse bright red color, with several small blisters and larger blebs which contained a thin seropurulent exudate. Some of the larger blebs were from 1 to 2 cm. in diameter. Careful inquiry proved that no mistake had been made in the ointment used. Inquiry was then made as to whether the patient was taking iodids. This inquiry was answered negatively, but brought out the fact that the so-called colorless tincture of iodin had been used externally.

This tincture of iodin had been prepared by adding to ordinary tincture of iodin enough sodium thiosulphate to displace the color. It should be remembered that such a pharmaceutical preparation would result in a mixture of sodium iodid and sodium tetrathionate, and that since it would no longer contain free iodin it should not be called "tincture of iodin" ($2Na_2S_2O_3.5H_2O+I_2=2NaI+Na_2S_4O_6\ IOH_2O$).

I attributed the condition to biniodid dermatitis. As a means of corroboration some of the "tincture of iodin" and the ointment were rubbed up together and the white ointment was at once converted into a pink or brick-red. Extraction of the oil by ether left a brick-red granular precipitate.

The reaction in and on the skin between the sodium iodid (NaI) of the mixture and the ammoniated mercury ($HgNH_2Cl$) of the ointment had evidently resulted in the production of biniodid of mercury (HgI_2), which, through its irritating influence, had produced a dermatitis.

A PECULIAR CAUSE OF INTESTINAL OBSTRUCTION

ISRAEL BROWN, M.D.
NORFOLK, VA.

Patient.—E. Z., a white man, aged 29, family history negative, was seen first by family physician September 8, suffering with pain in the abdomen, was given purgatives without any relief. Next day purgatives and enemas were given without any relief. In the afternoon, when I saw the patient, he had pain of an intense griping character and vomiting; he retained nothing by stomach; had no fever. The diagnosis was intestinal obstruction.

Operation.—When the abdomen was opened in the median line, free fluid was found in the abdominal cavity. In the ileum, about two feet from the ileocecal valve, two hard lumps, 2 inches apart, were found obstructing the lumen of the intestine. The intestines were incised, the foreign bodies removed, the intestine sutured, and the abdominal wound closed.

The patient made an uneventful recovery.

The foreign bodies consisted of unmasticated dried apples. The patient had been eating, the morning of his illness, apples dried in portions of halves and quarters, swallowing them without much mastication. The portions after entering the intestines continued to swell, as dried apples do, and obstructed the lumen of the intestine.

Therapeutics

GENERAL PROPHYLAXIS OF TYPHOID FEVER

In many particulars, no disease surpasses typhoid fever in its importance. It attacks, as a rule, healthy adults, causing a sickness that may last for weeks and even months, and may frequently end in death. It is one of the most preventable of all infectious diseases; it is, therefore, almost inexcusable that it is so widely prevalent.

It is now generally recognized that the essential agent in the causation of typhoid fever is the *Bacillus typhosus*. Since its discovery in the early '80s, and subsequent careful investigation by a number of students, our knowledge of the method of its transmission has been greatly increased. The bacillus has been found in the blood, in the feces, in the urine, and in the bile. It cannot always be discovered in the early days of the disease, but in the second or third week it can generally be detected. It may

persist for years, even as many as twenty-five or fifty, after the patient has become convalescent. It may also exist in the body, and particularly in the feces and urine of individuals who have never themselves, so far as can be determined, suffered from an attack of the disease, but who have taken the infection into their bodies in some perhaps unexplained way. These individuals in whom the bacillus exists are known as "typhoid carriers," and those in whom the bacillus exists, but who have never suffered from an attack of the disease, are known as "contact carriers."

The problem in the prevention of typhoid fever is the destruction of the bacilli which are excreted by the patients suffering from the disease, or by the typhoid carriers. It might seem that this would be a simple task, and it has been claimed that typhoid fever might be stamped out in any country within a year, but such a very desirable and Utopian result seems very unlikely of accomplishment in our generation.

To consider first the measures which should be adopted in the case of the patient who is ill with typhoid fever: It is the duty of the physician to lay down such rules for the guidance of the patient and his treatment as will effectually prevent the dissemination of any of the morbific bacilli. The physician's first and most important duty is to make an early diagnosis of the disease. It has been too much the practice in past years for the physician to neglect this important part of his work. Patients have been treated for malaria, for simple continued fever, for bilious fever, and many other real or imaginary conditions who actually were suffering from typhoid fever. There is no excuse to-day, and there has not been much excuse within the last twenty or thirty years, for any physician to overlook the possibility of his patient having typhoid fever on the first day of his attendance. This does not mean that he must actually make a positive diagnosis of the disease at his first visit, but it does mean that he must be on the alert to consider the possibility that his patient may have typhoid fever; and if he does this he will save himself and the community a great deal of trouble.

While possibly the infection may be communicated by a person in the first few days of the disease, this is not nearly so probable as during the second and third weeks, when the danger is the greatest.

The bacilli are found most frequently and most abundantly in the feces. It has long been recognized that in them the chief danger of the transmission of the disease lies, and it has long been recognized that their effective disinfection is most important and most necessary. This the physician should insist on. There are various methods of doing this. The feces immediately on being passed should be covered with a 5 per cent. solution of phenol, and the hard masses should be broken up so that the disinfectant will thoroughly penetrate the fecal matter and come in contact with all microorganisms which may exist therein. Other disinfectants may be used, such as the chlorid of lime, corrosive sublimate, cresol, and the sulphate of iron. The utmost cleanliness should be used by the attendants in connection with the movements of the bowels. The skin surrounding the anus should be carefully washed with a disinfectant solution, and the cloths used for this purpose should be put in paper bags and subsequently burned. The attendant also should, after bathing the patient, always wash her hands in a disinfectant solution. In a similar manner the urine should be discharged into a vessel and mixed with a disinfectant solution.

The bacilli can sometimes be found in the sputum, and if the patient has any cough, the sputum should be collected on cloths and burned. Even if the patient has a dry cough, expectorating the so-called droplets from the mouth, pains should be taken to collect this on pieces of cloth which should be burned.

All bedding should be soaked in a disinfectant solution and boiled before being washed. The cups, glasses, dishes, knives, forks, spoons, and napkins used by the patient should also be disinfected before being washed.

During convalescence, the feces and the urine should be subjected at intervals to bacteriologic examination, to determine whether the bacilli are still present. It has been found that they may be absent at one time, and may reappear later, so that repeated examinations are necessary. The patient should be carefully isolated until repeated examinations have shown entire absence of bacilli, both from the feces and the urine. When these rules have been observed in the care of any patient suffering from typhoid, he, his friends, and the physician, will rest assured that there will be very little likelihood of his communicating the disease to anyone else directly or indirectly.

As has been stated, the disease may be carried directly from the patient suffering from the disease, or from a so-called bacillus-carrier. The bacilli may be received directly by a person who does not possess immunity to the disease by handling articles, such as clothing or utensils used in eating, which have been contaminated by fecal matter, urine, or sputum from a typhoid patient. A far more common mode of infection is indirect method, which embraces infection through water and through various food supplies, especially milk and oysters. Many epidemics have been due to the infection of a water-supply from patients suffering with typhoid. This may occur to a limited water-supply, such as that furnished from a well or spring to a single family or to a few families, or to the water-supply of a large city. It was recognized many decades ago that a well, spring, or water-supply might be infected by improper disposition of the fecal discharges of a patient suffering from typhoid. Before disinfection was generally recommended and occasionally done, it was a common practice to throw the discharges from the bowels onto the ground in any convenient place, or into a so-called privy. If this happened to be in winter, when the ice and snow melted, or in any season of the year, when the rain fell the bacilli contained in the discharges were washed away through the ground, and if a spring or well or brook happened to be in the way of this current of flowing water, it was sure to be contaminated with the bacilli, and the people who drank of the water were very likely to become infected with the disease. With the more general spread of the knowledge of the nature of the disease and the manner of its introduction into the system, this method of transmission is becoming less frequent and less important.

Another important agent, and perhaps at the present time the most important of all, is the milk supply. It has been determined that typhoid bacilli multiply in milk, and this is true of very few other media. The milk may be contaminated in various ways, either directly from patients suffering from the disease, or from a bacillus-carrier. The infection may occur from handling the milk with infected hands, or from the use of infected water in washing the cans and bottles in which the milk is carried. This is to-day perhaps the most common, and yet the most elusive method of transmission.

Shellfish in general are said to be common media for the transmission of typhoid, but the oyster is the chief agent in this communication. This happens in the following manner: The oysters are taken from deep water and placed in shallow, fresh water in order that they may absorb the fresh water and, as the expression is, become fattened. This shallow water is very likely to become infected by sewage from surrounding houses, and if there happens to be a case of typhoid fever in a house, the sewage of which drains into the bed where the oysters are fattened, the oysters are likely to absorb the bacilli and carry them to anyone who eats the oysters, unless they have been thoroughly cooked.

TYPHOID BACILLUS-CARRIERS

One of the most interesting, and perhaps the most important, problem connected with the prophylaxis of typhoid fever which has attracted study and discussion during the last dozen years is that of the typhoid bacillus-carrier. It is only within comparatively recent years that it was discovered that a not inconsiderable number of cases of typhoid fever, whose origin had been inexplicable by the ordinary known methods of contagion, were due to infection from persons whose excretions contained the typhoid bacilli, although they had not recently themselves been ill with the disease.

These bacillus-carriers were found to be divided into two classes: one class embracing those who were known to have had well-marked attacks of typhoid fever; the other, those who had not suffered an attack of typhoid, so far, at least, as it was possible to learn from a study of their pathologic history. These latter individuals are believed to become infected with the bacilli by contact with some individual suffering from typhoid fever, but through the possession of some immunity they do not suffer the ordinary febrile attack of the disease, but the bacilli remain within their bodies and undergo multiplication and subsequently are excreted.

Under another form of classification these bacillus-carriers are distinguished as: (1) precocious carriers, which includes persons who have been recently infected with the disease but have not yet shown symptoms of it, although they may later do so; (2) the convalescent, temporary or transitory carriers who have passed through the disease and are convalescent from it, but whose excretions still contain the bacilli; (3) the chronic carriers, those who after an interval of three or four months have not ceased to present the bacilli in their excretions.

It is generally recognized that typhoid bacilli occur in the blood in a large majority of patients suffering from typhoid fever. In the feces, they are found most frequently about the third week of the disease. Various observers have found them in from 33 to 100 per cent. of cases in the third and fourth week of the disease. They are less commonly found in the urine, in ordinary cases, but it is generally agreed that they are found there in from 20 to 25 per cent. of typhoid patients. Some observers believe that in all cases in which the bacilli are found in the urine, there will also be found a slight trace of albumin. They may appear in the urine early in the disease, and in the majority of cases disappear in from three to thirty days, but in exceptional cases they may persist much longer. These facts render it important, from the standpoint of the sanitarian, to observe the cases of typhoid fever during convalescence much more thoroughly than has hitherto been done. When it is considered that these bacillus-carriers may continue to excrete bacilli for from one to fifty years after the original attack of the disease or the original infection, the immense importance of preventing their existence is easily recognized.

The natural corollary of these observations is that the health authorities in every city should conduct systematic observations of the urine and feces of every typhoid fever patient until repeated examinations on different days show that both these excretions are free from typhoid bacilli. It has been suggested that when the typhoid bacillus-carriers have been entirely eliminated that very much will have been done to entirely abolish typhoid fever.

When it has been determined that a certain individual is a typhoid carrier, the next problem is how to stop his elimination of typhoid bacilli. This is a problem which is both important and difficult. Where the bacilli are eliminated with the feces, it must be taken into account that the gall-bladder is a very important focus for the development of the bacilli. This is often associated with inflammation of the gall-bladder and with the development of biliary calculi. In fact, long before the existence of bacillus carriers was even suspected, it had been noted that people who had had typhoid fever were especially likely to suffer from inflammation of the gall-bladder and from biliary calculi.

The attempt has been made to destroy the bacilli in the gall-bladder and intestines by the administration of various drugs, among which may be mentioned hexamethylenamin (urotropin), salol, beta-naphthol, oil of turpentine, sodium salicylate, chloroform, calomel, and bile and its salt. All of these drugs, however, have but a temporary effect. The most useful are hexamethylenamin, sodium salicylate, and salol. Even the *x*-ray has been tried, but seems to be of little value.

When the bacilli are found in the urine, hexamethylenamin has been tried, and while it does decrease the number of bacilli eliminated during its administration, they often reappear when the use of the drug is discontinued.

When drugs fail, the vaccines, preferably the autogenous vaccines, have been used with apparent benefit in several cases. The usual dose is from 40,000,000 to 1,000,000,000, repeated several times. This treatment with vaccines is the more efficient the earlier during convalescence it is commenced.

The carrier himself usually suffers little inconvenience from the presence of the bacillus within his body. In some cases there may be gall-bladder symptoms, due to inflammation of the gall-bladder, or to the formation and presence of calculi. Occasionally headaches are complained of. Sometimes intestinal disturbances are noted, especially in the spring, summer, or late autumn. When the carrier is aware of his condition, and of the efforts which are taken to cure him of it, if of a nervous temperament, he may develop a form of neurosis. Sometimes the carrier may succumb to a general infection by his own bacilli causing auto-infection.

Neurasthenia an Insanity.—In pure neurasthenia there is no disturbance of the general relationship of the individual to his environment, no disorder of conduct, and therefore no insanity. It is unfortunate that the term "neurasthenic insanity" should have been applied to patients suffering from this condition in whom, while there is admittedly no insanity, the mental symptoms are exceedingly prominent. It is totally erroneous to speak of insanity, however we may qualify it, in regard to persons who are not insane, and a better term for these conditions of neurasthenia in which the symptoms are largely mental would be "psychasthenia gravis."—A. F. Tredgold, in the *Practitioner*.

XUM

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IMPURE AIR AND MEDICINE

Impure air has long been considered the direct cause of many diseases which modern medicine can no longer explain on that basis. Laymen still not infrequently ascribe such diseases as typhoid and diphtheria to "sewer-gas" contamination, and the very name of malaria bears testimony to the erroneous theory with regard to it formerly held by the medical profession. But there remains a large and important class of diseases, principally of the respiratory tract, in the production of which atmospheric impurities play no small part. So, for instance, workers in the dust-producing industries are notoriously liable to tuberculosis, to say nothing of the added danger in the case of those dusts that in themselves are poisonous.

The vast expansion of our modern industrial centers, with the aggregation of large numbers of smoke- and soot-producing furnaces, has opened a new phase of the subject, and one whose exact significance is still a matter of dispute. The ultimately injurious action of the constant inhalation of smoke and carbon particles can almost be assumed as self-evident; but that it has effects of any great seriousness cannot be regarded as proved. In a long series of articles Ascher[1] has sought to demonstrate, by both statistical and experimental evidence, the directly injurious action of the "smoke plague" in causing death from acute inflammatory diseases of the respiratory tract.

On the other hand, Gebecke[2] in a recent article, disputes Ascher's findings, both experimental and statistical. Inasmuch as his statistical data are for the most part derived from the same sources as those of Ascher, the ultimate result seems merely to demonstrate anew the proverbial fallaciousness of such evidence. But, nevertheless, Gebecke's article serves to indicate that our modern smoke evil has not the pronouncedly harmful effect on the mortality rate that one might be inclined to assume. In regard to such diseases as may be considered as directly air-borne, such as those produced by the poisonous dusts, or by inhalation of "infectious droplets," the situation is of course quite different. The recent rapid spread of the pneumonic form of plague in North China demonstrates strikingly the potentialities of direct respiratory infection; and occupational dust-poisoning, although far less wide-spread, has been considered of sufficient importance to justify legislative control in some parts of Europe at least. The means taken to combat the evil are as ingenious and as varied as are the different industries in which it occurs. Moistening of material, substitution of innocuous ingredients for the poisonous ones, and removal of dust at the point of origin, are all taken advantage of when possible. But there still remain several industries in which these procedures are inapplicable, and in the worst of these, as for example the alkali, chrome, and dry lead works, the German government prescribes the use of respirators. A comparative experimental study has been made of the different types of these by Schablowski,[3] and his results are of interest as revealing the inefficiency of many such devices. Twenty-six of a total of thirty-seven masks of different manufacture permitted the passage of 30 per cent. or more of dust, some allowing as much as 89 per cent. to pass through. Of the remaining eleven, five were variations of the same model, and two were respirators constructed experimentally by Kobrak.[4]. These last consisted simply of a fine-mesh batiste, fastened in cowl fashion by means of constricting bands about the forehead and shoulders, with an aluminum frame to keep the gauze some distance from the mouth and nose. Such a mask, it was found, absolutely prevented the passage of infectious droplets forcibly expelled by sneezing from a distance of 30 to 40 centimeters. With dust it was not so effective, as 18 per cent. passed through. On the substitution of filter-cloth for the batiste, this was reduced to 11 per cent., but at the expense of some degree of the comfort with which it was borne. The best of the commercial masks, similarly equipped, was just about as effective.

The data cited here seem to point out in some measure the difficulties that lie in the way of adequate legislative control of occupational diseases. As Schablowski somewhat pessimistically states, the choice of respirator in any given case would depend on the chooser; if the employer chose, the cheapest would be selected; if the male laborer, the most comfortable; and the female laborer, the most becoming—no one apparently being greatly concerned with the practical efficiency of the device.

1. Ascher: Deutsch. med. Wchnschr., 1909, xxxv, 585.
2. Gebecke: Ztschr. f. Hyg. u. Infectionskrankh., 1911, lxviii, 105.
3. Schablowski: Ztschr. f. Hyg. u. Infectionskrankh., 1911, lxviii, 169.
4. Kobrak: Ztschr. f. Hyg. u. Infectionskrankh., 1911, lxviii, 157.

THE CHOLERA SITUATION

Official reports indicate that cholera has appeared in Hawaii, 35 cases and 26 deaths having occurred between February 25 and April 16, 1911. This close approach to the Pacific Coast and actual infection of the island territory gives cause for concern at this time, when the disease has apparently receded from European ports.

The present pandemic that has now threatened both our Atlantic and our Pacific coasts began in India in 1902, and in that year spread to China and the Philippine Islands. Since then the disease has gradually but steadily extended, both by caravan routes and by sea, until Persia, Arabia, Egypt, Syria, Palestine and Asia Minor were infected. Had the infection stopped there, American shipping would have been in no great danger, but outbreaks also subsequently occurred in Russia, a few cases were reported from Germany, and during the past fall and winter rather severe outbreaks have occurred in different parts of Italy and the Madeira Islands.

During the past year, cholera prevailed in serious form in Japan, which was an added menace to the west coast, and now that the disease has reached Hawaii, the danger to the United States is more direct and threatening than at any time since 1892.

That there has been real danger of the introduction of cholera during the past few months is shown by the fact that cases were discovered among arriving aliens at the ports of New York and Quebec. The fact that Italy was declared free from cholera Jan. 31, 1911, and Funchal on February 24, is, on the other hand, reassuring, but the knowledge of the liability of recurrence of the disease in previously infected localities must be borne in mind.

It is altogether probable that the disease will recur in some parts of Europe during the coming summer, and render necessary close quarantine supervision over transoceanic shipping. During the recent past this supervision has consisted in the sanitary inspection of ships and passengers at both foreign and domestic ports, close medical inspection of aliens, and the notification of state and local health authorities regarding the destination in the United States of all arriving aliens.

Such precautions would seem to furnish more than adequate protection; yet, owing to the fact that the infection of cholera may be carried by healthy individuals showing no signs of the disease, it would be possible for a bacillus-carrier to enter the United States without detection, and the nearer the approach of cholera to our shores, the greater is this danger. The present situation, therefore, demands that federal authorities shall be provided with all adequate facilities to prevent the introduction of the disease and its spread, should it unfortunately gain entrance; and all health officers should be especially alert and look with suspicion on any intestinal disturbance, particularly in individuals recently arrived, or associated in any way with newcomers.

Neurasthenia and Movable Kidney.—Neurasthenia is an exceedingly common symptom of movable kidney. To those well acquainted with the anatomy of the kidney and the difficulty with which the organ is displaced from its position surgically, the idea that neurasthenia can cause movable kidney appears absurd. Neurasthenia can no more cause movable kidney than it can dislocate a joint.—C. W. Suckling, in the *Practitioner*.

PRESIDENT TAFT'S MESSAGE TO PHYSICIANS

President Taft was tendered one of the most extraordinary receptions and banquets, as well as a demonstration of popularity last night, that has marked his career as President of the United States, and in being the guest of honor of the Medical Club of Philadelphia . . . received fitting tribute for his humanitarian endeavors while secretary of war and as chief executive.

Thus is expressed the layman's view—that of the Philadelphia *Public Ledger*—of the splendid testimonial banquet and reception tendered by the physicians of Philadelphia, of Pennsylvania, and of the whole country—for the country as a whole was represented—to the President of the United States last week at Philadelphia. The officers and members of the Medical Club of Philadelphia are to be congratulated on the well-planned and dignified testimonial to the President of the United States in recognition of his services to sanitary science and as an appreciation of his aid in the advancement of public medicine.

No other president has been so honored by the medical profession; and no other president has so honored the physicians of the United States. But it must be said also that no other president has been brought into contact with physicians and their work in so many ways—has had such a practical knowledge of what medical science has done and is doing—for no other president has had the opportunities for personal observation of the results of scientific sanitation that President Taft had in the Philippines, in Cuba, in Porto Rico, in the Canal Zone and as Secretary of War. His address to the thousand physicians at the reception—and to the medical profession of the country, for he took pains to emphasize the fact that he had a message for the medical profession of the United States—was a gratifying appreciation of the economic and humanitarian benefits that have resulted from modern medicine. It was also an evidence that, for a layman, the speaker had an unusually wide knowledge of medical affairs and grasp of medical science and what it has accomplished.

As one listened, one could not help believing that, if President Taft could have his way about it, public health matters would be given greater recognition by the national government than they are now given, even to the extent of the creation of a department of public health, with a secretary in the cabinet. Of course he did not say so. He did not even hint at a department of public health, or intimate that he had ever heard of such a proposition; but others thought of it, and three speakers who followed him mentioned it aloud, and with emphasis. Not that there was any indication of a desire on the part of any one to make use of the opportunity to advance the idea of a department of public health or any other measure; on the contrary, the spirit that prompted the function and that prevailed throughout the evening was that of brotherly love and of respect for the President, who by word and deed, in the many responsible positions he has occupied, has shown a knowl-

edge of medical science and an appreciation of its importance, from the economic as well as from the humanitarian aspect, as has no other public man. The medical profession feels more than ever assured that President Taft is in sympathy with the plans for increased federal activity for better public health.

Current Comment

LIFE-SAVING ABROAD AND LIFE-WASTING AT HOME

It is significant, and by no means gratifying to our national pride, that President Taft,[1] when desiring to demonstrate the value of modern sanitary methods, was forced to draw all his illustrations from our island and provincial possessions. Modern sanitary science has abolished yellow fever in Cuba, discovered the cause and largely controlled the ravages of hookworm anemia in Porto Rico, barred yellow fever and Chagres fever from the Canal Zone, isolated leprosy in Hawaii and the Philippines and aided in the investigation of beriberi. This work has practically revolutionized conditions in our tropical possessions and has enabled the President to say that "in the short twelve years that we have been responsible for the health of our people in the tropical climates, we have made more progress in the discovery of methods of prevention and cure of tropical diseases than all other countries have made in the past two centuries." Modern sanitary methods backed up by intelligent and authoritative administration have indeed worked wonders in the tropics; but what of our own country? Tuberculosis, typhoid, pneumonia and the appalling black plague of venereal infection still lay waste the land. They are tolerated chiefly because we are accustomed to their presence. If tuberculosis were a newly discovered tropical disease, if typhoid fever were limited to the tropics, how horrified would we be at their ravages and how warmly would we applaud any efforts of the national government to control them! But through long association, we have become tolerant of their presence and reconciled to their destructiveness. Yet modern sanitation, if permitted, can effect as marvelous changes here as in the Canal Zone or in Havana.

PUBLIC HYGIENE AND PRIVATE PRACTICE

In his response to the toast "The American Medical Association," Dr. Welch emphasized one fact thoroughly familiar to physicians but not yet appreciated by the public, which should be given the widest possible circulation. He said: "Public hygiene and preventive medicine have acquired an economic and social significance among the organized forces of civilization but little appreciated to-day by the general public or by legislators and administrative officers of government. They occupy a field quite apart from systems and schools of medical practice." The opponents of increased governmental activities for the conservation of life are apparently unable to discriminate between the practice of medicine by the individual physician and the application of demonstrated scientific facts in public hygiene. In no other way is it possible to account for the fact that efforts to increase the health functions of the federal government have been regarded as an invasion of the personal rights of the individual. He who cannot distinguish between the treatment of an individual typhoid fever patient by an individual physician, and the removal of the cause of typhoid fever through the purification of the water-supply of a community, is still in an elementary state of education. The treatment of the individual patient is not and should not be a matter of governmental concern. The correction of insanitary and unhygienic surroundings and conditions is of the highest importance to the modern state and is worthy of its utmost activities.

1. See report of the banquet of the Medical Club of Philadelphia, in General News, this issue.

THE PRESIDENT VERSUS "LIFE"

In a former number[1] we quoted the profound and learned comments of *Life* regarding the use of typhoid vaccine in the army. In his address before the Philadelphia Medical Club, President Taft said on this point: "Now we have a division of 1,800 men in Texas and California. They have been there for two months living under canvas and in a country soaked with rain. . . . I need not recall the dreadful record of sickness from typhoid fever in the camps at Chickamauga. . . . Of the volunteer regiments mobilized during the Spanish-American war, 90 per cent. [about 16 per cent. of the men] became infected with typhoid fever within eight weeks after the date of mobilization. To-day, two months after mobilization with the modern health regulations and by the use of vaccine against typhoid, not one case of typhoid has appeared in the entire force, except that of one teamster who was not vaccinated." This seems to be a question of veracity between President Taft and *Life*.

HUMAN FALLIBILITY

To one who, from time to time, looks over the accident bulletin of the Interstate Commerce Commission, it is not a little discouraging to see the number of accidents that continue to occur in spite of the endeavor of railroad officials to prevent them. One safeguard sought for is to have more than one employee responsible for the carrying out of one particular order so that, if one man forgets or fails, the duty will be performed by another, or, at least, the error detected; and yet we find an engineer rushing past both torpedo and red lantern, a conductor and engineer both misreading an order, a telegraph operator making an assumption contrary to written orders in his hand—each an instance of human fallibility. Then the trains come together and lives and property are lost. The human mechanism often seems far more fallible than mechanical safety devices. One reason may be that we are not accustomed to investigate cause and effect so rigorously in the case of the human as in that of the inanimate machine. When disaster occurs from the wrong working of a steel and iron machine, people do not stop with saying "The machine was to blame"; those who pay the cost of the new one usually find out whether the old machine was made of

1. THE JOURNAL, March 25, 1911, page 1902.

poor material, constructed on wrong principles, worn out or inefficiently operated; and they endeavor to avoid that cause of failure for the future. When a wreck occurred through the failure of a telegrapher to transmit orders or of an engineer to read them, if we may judge by the reports of those acquainted with the circumstances, the tendency in the past too often has been to stop with "fixing the blame," without endeavoring systematically to go further and find out how such errors can be eliminated thereafter. A letter published in this issue indicates that the railroads of the country are awake to their responsibilities. This is gratifying and creditable. Our correspondent, however, seems to take the position often assumed, namely, that the road cannot justly be held responsible for accidents due to failure of employees to carry out orders. We believe that more exhaustive study of the problem will show that a public service corporation is as responsible for the quality of its employees as for that of its machinery; as responsible for their discipline as for the repair of its equipment. Since, no matter how much may be required of inanimate machines, the directing human element can never be wholly eliminated, we hope that systematic study of railroad accidents from the point of view of the circumstances which affect the working of the human mechanism will some day help to reduce the total as nearly as possible to the sum of the humanly unpreventable.

CHILD WELFARE EXHIBITS

In the education of the public in hygienic and health matters, the child welfare exhibits that have been held in a number of cities constitute an important agency. The exhibit recently held in New York City was a pronounced success, being attended by a large number of people. An exhibit is being held in Chicago (May 11-25) and great interest is being taken to make it a success by both the municipal health department and the various public welfare agencies. Among the features of the exhibit are demonstrations of the methods of care and feeding of infants, infant hygiene, illustrations of defective methods and their results, graphic representations of the high death-rate of infants from preventable causes, the causes and manner of preventing blindness in infants, the problems of fresh air and light, play and play-grounds, the effects of work and the hours of work on children, what municipalities and the various social welfare agencies are doing for the welfare of the children, and by charts, placards, figures, pictures, exhortations, demonstrations, etc., showing what may and should be done for the advancement of the welfare of the rising and the coming generations of children to make them healthy, strong and efficient citizens. As indicated by the success of the New York exhibit, the demonstration in Chicago should have valuable educational results.

SACCHARIN AN ADULTERANT

The referee board that was appointed to review some of the decisions of the Bureau of Chemistry has recently concluded its investigation regarding the use of saccharin in foodstuffs. Those of our readers—and they are many—who received with regret the board's decision regarding the use of benzoate of soda, will be pleased to learn of its decision in the case of saccharin. The board reports that "the continued use of saccharin for a long time in quantities over three-tenths of a gram per day is liable to impair digestion; and the addition of saccharin as a substitute for cane sugar or other forms of sugar reduces the food value of the sweetened product and hence lowers its quality." On the strength of these findings, the United States Department of Agriculture has declared that after July 1, 1911, saccharin-containing foods will be regarded as adulterated within the meaning of the Food and Drugs Act. As saccharin is several hundred times sweeter than sugar and by no means an expensive product, it has been used for years as a substitute for sugar by manufacturers who are more concerned with their dividends than with the quality of their products. Enormous quantities have been used as a sweetening agent in the inferior qualities of ginger ale and it has been used to some extent by the manufacturers of canned corn, peas, etc., to lend an artificial sweetness to these products. Fortunately, this form of fraud—for it is a form of fraud—will have to cease, so far as goods for interstate commerce are concerned, after the first of July of this year.

Medical News

ILLINOIS

Hospital Corner-Stone Laid.—The corner-stone of the Deaconess Home and Hospital of the Central Illinois Conference of the Methodist Episcopal Church, Peoria, was laid, with impressive ceremonies, May 3.

State Surgical Institute for Children.—Companion bills, providing for the establishment of a state surgical institute for children under 14 years of age and appropriating $60,000 for buildings and $15,000 for furnishing, were passed by the House of Representatives, April 26, without a dissenting vote. The establishment of the institute is dependent on the donation of 160 acres of suitable ground for a site.

Optometry Bill Defeated in Senate.—The State Board of Health announces that Senate Bill No. 140 to regulate the practice of optometry in the State of Illinois was defeated in the senate, May 3, by a vote of 14 to 10. Eighteen more senators were present but did not vote. To pass a bill, twenty-six votes are required. This action is said to kill the house bill which is still in the subcommittee of the judiciary committee of the House of Representatives.

Personal.—Dr. Arthur F. Wilhelmy, Decatur, has been detailed for duty at the maneuvers, San Antonio, Tex.——Dr. and Mrs. Hugh M. Orr, LaSalle, sailed for Europe, May 3.——Dr. Charles W. Hall has been appointed physician for Kewanee Township.——Dr. James D. Harlan has been made mayor of Fairfield.——Dr. Wiliam G. Alexander has been elected president and Dr. William C. Danforth secretary of the Evanston Tuberculosis Institute.——Dr. Theodore F. Gerould, Centralia, has been appointed diphtheria coroner of Marion County.

District Society Meeting.—The District Medical Society of Central Illinois held its thirty-seventh annual meeting in Pana, April 25, and elected the following officers: President, Dr. Melvin P. Parrish, Decatur; vice-presidents, Drs. John H. Miller, Pana, and Edgar B. Kerr, Westervelt, and treasurer, Dr. John N. Nelms, Taylorville.——The annual meeting of the Rock Island Medical Society was held in Rock Island, April 11. The following officers were elected: President, Dr. Warner L. Eddy, Milan; vice-presidents, Drs. Evlan Sargent, Moline, and William D. Snively, Rock Island; secretary, Dr. Albert Nicholas Mueller, Rock Island (reelected); treasurer, Dr. Arthur Thomas Leipold, Moline (reelected); delegate to the state society, Dr. Henry S. Bennett, Moline, and alternate, Dr. Joseph R. Hollowbush, Rock Island.

Approves Endeavor to Raise Standard.—Henderson County Medical Society, at its last meeting held in Stronghurst, adopted resolutions setting forth the existence of a number

of unnecessary medical colleges from which great numbers of incompetent or illiterate physicians are graduating; that some of the best equipped medical colleges, owing to competition, are graduating improperly qualified physicians; that state boards of examiners have not proved themselves capable of neutralizing the lenient tendencies of certain medical colleges; that many teachers in medical schools reap undue advantage from their connection with such schools in the way of honors and fees; and that the foregoing conditions are disastrous to the country practitioner; and resolving that the management of the American Medical Association be thanked for the services already rendered in the way of elevating medical standards, and that it be requested to employ its utmost endeavors still further to raise the standards of medical education and of medical practice in the United States.

Chicago

Hospital Enlarges Site.—Provident Hospital has acquired property north of its present location as the result of a campaign which brought in seventy-eight contributions, ranging from $1.00 to $1,000 each.

Hurt in Auto Wreck.—Drs. James A. Jennings and H. E. Corley, while riding in their automobile across a grade crossing of the Chicago Terminal Railroad, May 4, were struck by a train and painfully injured.

Much Communicable Disease.—During the week ending May 6, twenty-six cases of diphtheria were received at the Contagious Disease Hospital. Twenty-eight patients were discharged, recovered, two died, and sixty-four patients still remain under treatment. The Isolation Hospital received seven cases of small-pox, all of unvaccinated individuals, discharged five patients, recovered; one patient died, and thirty-one remain under treatment.

Staff Returns to Hospital.—Drs. Alice Conklin, Henrietta M. Farquharson, Bertha Van Hoosen, Grace Campbell, Lois L. Wynekoop, Sara J. McCollum and Louise Acres, who were discharged from the staff of Mary Thompson Hospital on charges of alleged insubordination March 1, have been reinstated, and, beginning with May 9, the institution is operated under new management. The new plan provides that the Chicago Woman's Club will be represented on the board of control by eight of the twelve members.

MARYLAND

Personal.—Drs. Timothy Griffith and J. Marshall Price have been appointed members of the Board of Health of Frostburg.

Increased Accommodation at Sanatorium.—A contract has been entered into, that will provide accommodation for two hundred advanced tuberculosis patients at the State Tuberculosis Sanatorium.

County Society Election.—Montgomery County Medical Society held its annual meeting and election at the Chestnut Lodge Sanatorium. Dr. James Dudley Morgan, Chevy Chase, was elected president; Dr. Frederick N. Henderson, Rockville, vice-president; and Dr. John L. Lewis, Bethesda, secretary and treasurer (reelected).

Hospital Transferred to Church Authorities.—The papers formally conveying the Maryland General Hospital to the Methodist Episcopal Church were signed April 27. The conveyance was made in return for the assumption by the church of the debt of $167,000 which rests on the institution. The relations of the faculty of Baltimore Medical College to the institution remain unchanged.

No Attempts to Violate Pure Food Law Discovered.—Dr. Charles Caspari, Jr., Pure Food and Drug Commissioner, says that not a single deliberate attempt to violate or evade the state pure food law has, as yet, been discovered. In his opinion, the law has two defects which should be corrected: it grants permission to sell substandard goods, provided the formula is printed on the package, and it requires that every case be taken before the criminal court for settlement.

State Physicians' Meeting.—The one hundred and thirteenth annual meeting of the Medical and Chirurgical Faculty of Maryland was held in Baltimore, April 25-27, under the presidency of Dr. Franklin B. Smith, Frederick. The following officers were elected: President, Dr. Hugh H. Young, Baltimore; vice-presidents, Drs. J. L. Rieley, Pocomoke City, Daniel E. Stone, Mount Pleasant, and Joseph A. Chatard, Baltimore; secretary, Dr. John Ruhrah, Baltimore; treasurer, Dr. William S. Gardner, Baltimore; trustee, Dr. James W. Humrichouse, Hagerstown; councilors, Drs. Charles O'Donovan, Baltimore, Lewis C. Carrico, Bryantown, James E. Deets, Clarksburg, and Harry B. Gantt, Millersville; delegate to the American Medical Association, Dr. G. Lane Taneyhill, Baltimore; alternate, Dr. James J. Carroll; and members of the State Board of Medical Examiners, Drs. Lewis A. Griffith, Upper Marlboro, and James A. Stevens, Easton.

Baltimore

Faculty Appointments.—The following are recent appointments to the faculty of the College of Physicians and Surgeons: Dr. Charles E. Simon, professor of clinical pathology and experimental medicine, with Drs. G. Howard White and W. Milton Lewis as assistants, and Dr. Henry L. Whittle lecturer on physiologic chemistry.

Personal.—Dr. William Simon, the autochromatic photographer, is confined to his home with a slight attack of typhoid fever.——Dr. Lewellys F. Barker, who was operated on, April 10, for appendicitis and gall-stones, left the hospital, May 3.——The appointment of Dr. James M. H. Rowland to the Baltimore School Board has been confirmed by the city council.——Dr. Norman F. Hill underwent operation at Mercy Hospital recently, and is reported to be in serious condition.——Dr. Joseph C. Benzinger fell recently, breaking his arm.

Commencement at University.—At the approaching commencement of the University of Maryland, the address to the graduates will be delivered by Dr. Harvey W. Wiley of the Department of Agriculture, Washington, D. C. The honorary degree of LL.D. will be conferred on Christopher Johnston, M.D., A.M., Ph.D., professor of oriental history and archeology in Johns Hopkins University, who is a son of the late Dr. Christopher Johnston, for many years a leader in the profession of the state, and professor of surgery in the University of Maryland.

Favor Tropical Disease Congress at Baltimore.—The medical faculty of the University of Maryland has declared in favor of holding the Congress on Tropical Diseases, proposed at the recent meeting of the Medical and Chirurgical Faculty of Maryland, in Baltimore, as a recognition of the part played by the medical profession at the opening of the Panama Canal. It is pointed out that Drs. James Carroll, Walter Reed and Jesse W. Lazear received their training and inspiration in Johns Hopkins Hospital and the University of Maryland. The proposal is said to be meeting with general approval.

MASSACHUSETTS

Transfer of Nursery.—By a recent decision of the supreme court, the property of the Boston Day Nursery has been turned over to the dispensary in ratification of an arrangement entered into by mutual consent of both corporations, and actually in effect since last October. The dispensary is maintaining a hospital of sixteen beds for infants and children.

Bequests.—Under the terms of the will of the late Harriet E. Goodnow, Sterling, $5,000 is bequeathed to the Massachusetts General Hospital, $5,000 to the New England Hospital for Women and Children, and $5,000 to St. Margaret's Hospital; with the proviso that the money be used in each instance for the endowment of Waite memorial beds.

Hospital Notes.—The new St. Margaret's Hospital, Dorchester, Boston, was opened for public inspection, May 5. The building is situated on a high elevation and contains thirty-three private rooms. The hospital is an open-staff institution. ——On April 26, Dr. Caroline Hastings turned the first spadeful of earth for the foundation of the hospital, home and training school of the New England Moral Reform Society, on the old Fisher estate, Jamaica Plain.

Personal.—Dr. Henry J. Barnes, professor of hygiene in Tufts Medical School, Boston, announces that he will sever his connection with the school at the close of the present year.——Dr. Moses Greeley Parker, Lowell, was elected president-general of the Sons of the American Revolution, May 3.——Dr. and Mrs. John Bergeson, Boston, sailed for Europe, April 19. ——Dr. and Mrs. Martin T. Field, Salem, have gone abroad. ——Dr. Francis A. Bragg, Foxboro, has been reappointed medical examiner for Norfolk County.——Clement F. Coogan, Pittsfield, has been made a member of the State Board of Health vice James W. Hull, deceased.

MICHIGAN

Small-Pox in Hospital.—Small-pox which developed in the Homeopathic Hospital, Ann Arbor, April 22, was positively diagnosed as such, April 24. There were five cases and the patients have been quarantined on an upper floor of the institution.

Antituberculosis Association Formed.—At a meeting, held in Blissfield, April 18, at which Dr. Alfred S. Warthin, Ann Arbor, secretary of the State Society for the Prevention of

Tuberculosis, delivered an address, an antituberculosis society was organized and Dr. Rosingrave M. Eccles, Blissfield, was made chairman of the organization committee.

Personal.—Dr. James H. Bogan, Mackinac, while splitting wood a few days ago, cut off his left forefinger with an axe. ——Dr. Paul C. Dulitz, Detroit, has been elected president of the poor commission of Wayne County, and Dr. Otto Scherer, vice-president.——Dr. William Acker has been appointed city physician of Monroe.——Dr. Isaac W. Houston has been elected health officer of Marshall.——Dr. Clarence Young has been reelected mayor of Allegan.——The governor has sent to the senate the nomination of Prof. Robert L. Dixon to succeed Dr. Frank W. Shumway, Lansing, as secretary of the State Board of Health.——Dr. Henry A. Newkirk has resigned as health officer of Iron Mountain.——Dr. Charles N. Bottum, Birch, has been appointed physician of the Morgan Heights Sanitarium, Marquette.——Dr. James E. Mead, Detroit, major M. C., N. G. Mich., has been ordered for duty to the maneuver camp at San Antonio.

NEW JERSEY

Personal.—Dr. Richard Cole Newton, Montclair, has been appointed a member of the State Board of Health.——Dr. William H. Kensinger, Camden; Frank J. Hughes, Union, and Elmer S. Loomis, Mercer, have been appointed members of the State Tuberculosis Commission.——The residence of Dr. Robert H. P. Ellis, Paterson, was damaged to the extent of about $14,000 by fire and water, April 19.——Drs. William Franklin Faison, Louis Franklin, Oliver R. Blanchard, Edward Leonard Bull and William Phyle, all of Jersey City, will open a sanitarium on Fairmount Avenue in the Bergen section.

Health Officers' Association Organize.—At the meeting of the executive officers of the Board of Health of New Jersey, held at Newark, April 17, a permanent organization, known as the Health Officers' Association of New Jersey, was formed, with the objects of advance of knowledge relating to public health and sanitation and the encouragement of social intercourse among health board officials. C. H. Wells, Montclair, was elected president; John O'Brien, Jr., Plainfield, vice-president, and J. Scott MacNutt, Orange, secretary and treasurer. An executive committee was elected and the officers of this committee were instructed to draw up a constitution and by-laws to be presented at a meeting to be held May 17. All health officers allowed state board of health licenses are eligible for membership and, doubtless, this privilege will be extended to other health board officials and employees and members of local boards of health.

NEW YORK

Site for Tuberculosis Hospital.—An option has been given to the special supervisors' committee of Broome County on a tuberculosis hospital on the property owned by Mrs. W. B. Cleves, on the summit of Mount Prospect, near Binghamton, for $15,000. The building has been used for twelve years as a summer hotel and can, it is said, be utilized for a tuberculosis hospital with little remodeling.

Health Board Prohibits Exposure of Food.—Commissioner Lederle believes that the exposure of food to the dust and dirt of the public streets is a measure to health and has directed inspectors of the department to enforce strictly the sanitary code relating to the conditions under which food products may be sold when exposed outside of stores. The police department has been called on to assist in this work.

Hospital Notes.—Rockaway Beach has just opened its first hospital. It is a brick structure, built at a cost of $100,000, which was raised by popular subscription.——Mrs. O. H. P. Belmont and others who founded the Hempstead Hospital, Mineola, L. I., are said to be dissatisfied with the management of this institution. Recent action by the directors aims to do away with the hospital and to sell the property to Nassau County for an almshouse.

Antisyringe Bill Passes.—The assembly has passed the Boylan bill making it unlawful to sell at retail or give away hypodermic syringes or needles, unless the purchaser has a written order from a duly licensed physician or veterinarian. When syringes are sold to persons with orders the dealer is to enter the date of the sale and the name and address of the purchaser in a book kept for that purpose. The object of the bill is to reduce the rapidly growing drug habit.

Personal.—Dr. Robert E. Doran, Albany, has been appointed superintendent of the Long Island State Hospital, Flatbush, and Dr. Edward P. Case, Patchogue, has been appointed missionary of the American Board of Commissioners of Foreign Missions and, after six months' study in Paris, will go to Aintab, Turkey, and later to Erzeroum, Persia.——Dr. Eugene B. Horton has been appointed city bacteriologist of Niagara Falls, vice Dr. Harry C. Dumville.——Dr. G. H. A. Clowes, Buffalo, has gone abroad.——Dr. Charles H. Ludlum, Hempstead, is reported to be seriously ill with septicemia.

Bill Affecting Cold Storage.—The Senate Committee on Public Health has amended the Brennan bill and reported it favorably. The bill proposes to limit the period that foodstuffs could be kept in cold storage to six months, or if the State Commissioner of Health, or the State Commissioner of Agriculture permitted it, to one year. In its new form the period has been extended to ten months. Butter products are excepted and may be kept in cold storage for twelve months. The new bill requires the stamping of all foodstuffs received by cold storage warehouses with the date of receipt and gives the State Commissioner of Health authority to inspect and supervise all storage and refrigerating plants, to adopt reasonable rules for the protection of the consumer, and to designate persons to inspect warehouses.

New York City

New Hospital.—A new hospital in connection with the Ottilie Orphan Asylum in Jamaica, Queens Borough, has been dedicated.

Faculty Changes.—Dr. Henry Pike has been appointed assistant professor of physiology and will have charge of the undergraduate course at Columbia University.——Dr. Warfield C. Longcope, of the University of Pennsylvania, has been appointed assistant professor of medicine.

To Teach Office Hygiene.—The new Union Hospital, it is announced, will undertake to direct business and professional men, educators and ministers as to sanitary conditions under which they should work, and the length they and their employees should work each day and each year to make the most of their time, abilities and health.

Personal.—Dr. William L. Russell, Brooklyn, sailed for Europe April 29.——Fire in the residence of Dr. Joseph D. Nagel, New York City, April 30, caused damage amounting to more than $3,000.——Dr. Louise J. Bucholz, New York City, was given a surprise call April 22 by her friends of the Alumnæ Association of the New York Medical College and Hospital for Women, on the occasion of the twenty-fifth anniversary of her entrance into practice.

NORTH CAROLINA

District Society Meeting.—The fourth annual meeting of the Sixth District Medical Association was held in Durham under the presidency of Dr. William A. Graham of that city. The following officers were elected: President, Dr. John M. Manning, Durham; vice-president, Dr. Charles Henry Peete, Warrenton, and secretary, Dr. Charles Augustus Woodard, Durham.

Personal.—Drs. J. Howell Way, Waynesville, and William Oliver Spencer, Winston-Salem, have been reappointed members of the State Board of Health.——Dr. Bessie Puett, Dallas, has completed her term of service as assistant physician at the Williamsburg (Va.) State Hospital for the Insane and will enter practice at Dallas.——Major Eugene Beauharnis Glenn, Asheville, M.C., N.C.N.G., has resumed practice after absence of a month at the army maneuvers in Texas.

OHIO

Personal.—Drs. William T. Corlett and J. P. Sawyer, Cleveland, have returned from Europe.——Drs. Rodger Perkins and Howard D. Haskins, Cleveland, have been appointed to make an investigation as to the practicability and possibility of efficient chlorin disinfection of the city water-supply.——Dr. Lester E. Siemon, Cleveland, has been appointed a member of the State Board of Medical Registration and Examination. ——Dr. James A. Park, Columbus, fractured his right arm while cranking his automobile, April 20.——Dr. Edmund C. Brush, Zanesville, chief surgeon of the Ohio National Guard, has been retired with the rank of brigadier general.——Dr. Frank S. Thompson has been appointed a member of the Dayton Board of Health.

Tuberculosis News.—Dr. Henry Baldwin, superintendent of the Springfield Tuberculosis Hospital, has erected two tents adjoining the main building for incipient cases.——The directors of the infirmary for indigent tuberculosis patients of Stark County have suggested that a brick wing be added to the infirmary hospital at a cost of about $5,000.——At the first annual meeting of the joint board of commissioners in charge of the Kinnane Tuberculosis Hospital, it was reported

that the average cost per patient had been $1.69 per day. There have been thirteen deaths since the hospital opened. Three patients left the hospital with the disease arrested, and at the end of the fiscal year eighteen patients were under treatment.——The new district tuberculosis hospital, Lima, has cost, for the site, $6,525, and for equipment and appurtenances $65,378.44. The hospital will now accommodate about thirty patients.——A resolution was introduced at the Cleveland Common Council, April 10, authorizing the expenditure of $238,329.12 for the erection of a tuberculosis sanatorium.

Cincinnati

Personal.—Dr. David I. Wolfstein, who was operated on recently for appendicitis in the Jewish hospital, has returned home.——Dr. Charles T. Pearce sailed for Europe, April 30. ——Dr. Otto Jeuttner suffered a stroke of paralysis, April 18, and is reported to be in serious condition.——Dr. James A. Rudolph has resigned from the health department to accept the position of milk and food inspector at Anderson, S. C.—— Dr. Karl Zapp, at one time a prominent physician of Cleveland, is ill at the City Hospital with pernicious anemia.

Academy Censors Censure President.—At the meeting of the Cincinnati Academy of Medicine, April 17, the Milk Commission of the Academy, consisting of Drs. Albert Friedlander, Henry A. Woodward and Otto P. Geier, presented its fourth annual report and incorporated the following resolutions which were adopted:

WHEREAS, Certain members of this Academy have, by innuendo and otherwise, cast reflection on the integrity of the members of the commission in special reference to the financial administration of their work; and

WHEREAS, It has been suggested to the dairymen under the commission's supervision that they have been charged exorbitantly for such supervision; and

WHEREAS, Such action directly impugns the honor of the members of the commission; now therefore,

We, the members of this commission, do demand that these insinuations and the entire administration of the commission, from its inception to the present time, be searchingly investigated by the Board of Censors of the academy, who shall have power to employ an expert public accountant to assist them in their work. Furthermore:

We ask that this report by the Board of Censors be submitted in writing and made the special order of business of the Academy of Medicine for 9 o'clock on Monday evening, May 1, 1911.

A motion prevailed that the academy reelect the commission in recognition of its faithful and beneficent labors. At the meeting of the academy May 1, the board of censors submitted an exhaustive report, which, on motion, was adopted. The report after reviewing the splendid work of the Milk Commission, described in detail their methods of investigation, including the investigation of all accounts by a certified public accountant, and their examination of all who were in any way connected with the affair. Not only was the Milk Commission exonerated from every charge made against them, but the censors adopted a vote of censure against Dr. William D. Haines, president of the Academy, Dr. Frank Lamb and Dr. George Strobach, editor of the *Cincinnati Lancet-Clinic*, on the ground that they had been guilty of unprofessional conduct in their methods of investigation of the work of the Milk Commission.

PENNSYLVANIA

One Board Medical Bill.—On May 4 the "One Board Medical Bill" was passed by the house on second reading, all proffered amendments being rejected.

Gift to Consumptive Home.—Through Dr. Herman L. Duhring, superintendent of the Protestant Episcopal City Missions, the treasury of the Home for Consumptives, Chestnut Hill, has received $2,000.

New Hospital.—The Armstrong County Physicians' Association has sold stock to the amount of $75,000 for the new hospital at Kittanning, which is to cost $100,000. The details for the purchase of the site on which the hospital is to be built have been completed.

Personal.—Dr. Robert Steele has been elected health officer and Dr. Oliver S. Weddell city physician of McKeesport.—— Dr. Elmer G. Kriebel, Worcester, is ill with typhoid fever. ——At the reorganization meeting of the Board of Health of Reading, Dr. John N. Becker was elected president; Dr. Samuel L. Kurtz, a member of the committees on adulterations and poisons, and law and ordinance, and preventable diseases; Dr. William F. Marks, a member of the committees on drainage, sewerage and water supply, school hygiene, and registration and vital statistics; and Dr. Charles Roland, a member of the committee on registration and vital statistics.

Health Work in Pittsburg.—The annual report of the director of the department of health and charities, Pittsburg, mentions that the site for the tuberculosis hospital, for which $200,000 has been appropriated, will soon be selected, and that the plans will be ready shortly for the garbage incineration plant which is to cost $100,000. During the year there were 9,601 deaths, an increase of 2 per cent. over the preceding year, which is due, in great measure, to the great number of cases of infectious diseases, particularly measles. The medical inspectors made 80,000 inspections of school children during the year and the bureau of milk inspection, 17,797 inspections.

Philadelphia

Free Lunches for School Children.—The experiment begun in March by the lunch committee of the Home and School League, in order to prove the beneficial effects of the three-cent lunches (a warm meal at noon) on fifty children selected from the Woods School has been prolonged for an indefinite period.

For a Stricter Poison Law.—A conference at which Dr. Neff, Director of Public Health and Charities, and Dr. Christopher Koch of the State Pharmaceutical Board were present, was held at the private office of Coroner Ford, for the purpose of drafting a new and more stringent law governing the sale of cyanid of potassium and other deadly poisons and placing the bill before the legislature.

School for Consumptives.—Because of a disagreement with the superintendent of buildings of, the board of education, the Phipps Institute has withdrawn its offer to erect an open-air school for incipient consumptives and generally weak children on the roof of the General McCall School, and instead will build its shelter and conduct its experimental classes on the roof of the College Settlement Building at Fifth and Christian Streets.

Dr. Oliver's Bequests.—The will of Dr. Charles A. Oliver gave his entire estate, valued at $15,000, to charity. The will directed that the estate be divided in three parts and the income be distributed: for the establishment of the Charles A. Oliver operating room at the Wills Eye Hospital for indigent blind and lame, to the University of Pennsylvania for an annual gold medal to the leading medical student in ophthalmology, and to the College of Physicians for the purchase of journals on ophthalmology. Dr. Oliver left his ophthalmologic library to Harvard University.

Plans to Reduce Infant Mortality.—Dr. Joseph S. Neff, Director of Public Health and Charities, has asked the mayor to send a special message to Councils urging that body to appropriate $5,000 to further the summer campaign against infant mortality. The plans for this work include the maintenance of the open-air hospitals on the Race and Chestnut street piers, keeping them open day and night, the establishment of a third recreation pier at Shackamaxon Street Wharf and the erection of a tent for open-air treatment of babies in Fairmount Park, provided the Park Commission will grant permission.

GENERAL NEWS

Orthopedists to Meet.—The twenty-fifth annual meeting of the American Orthopedic Association will be held in Cincinnati, May 15-17, under the presidency of Dr. Albert H. Freiberg. Headquarters will be in the Hotel Sinton. One of the features of the meeting is announced as the address by Dr. Edward H. Bradford, Boston, on "Currents and Counter-Currents in Medicine and Surgery."

Congress Committee on Organization.—The seventh meeting of the committee on organization of the International Congress on Hygiene and Demography was held in the Army Medical Museum, Washington, D. C., April 15, with Dr. Abraham Jacobi, New York City, in the chair. Dr. Joseph W. Schereschewsky, U. S. P. H. & M.-H. Service, was made director of the exhibition. An exhibition building is to be constructed on government land between the Washington monument and the Continental Memorial Hall for an exhibit in connection with the meeting of the International Red Cross in the spring of 1912, and the plan for this building, which has a floor space of 17,500 square feet, may be modified so as to accommodate the exhibit of the congress. The proposal will be investigated. The executive secretary was instructed to invite the executive officers of the life-insurance companies of the United States and Canada to contribute suitable exhibits of their mortality experience or medical statistics, with due regard to the elements of age, race, nativity, occupation, locality, anthropometry and other pertinent facts of medical or general interest.

PRESIDENT TAFT AND THE MEDICAL PROFESSION

Banquet and Reception to President Taft and Invited Guests

Given by the Medical Club of Philadelphia at the Bellevue-Stratford, May 4, 1911

The Medical Club of Philadelphia gave an elaborate banquet May 4, President Taft being the guest of honor. This delightful affair is commented on editorially in this issue. A report of the speeches follows, some of them being given in full.

The reception following the banquet was held in the greater ballroom of the hotel, beginning at 9:30 p. m.

DR. WILLIAM L. RODMAN, president of the club, presided and felicitously presented each speaker. In an appreciative tribute he introduced the President, saying, in part:

We could, sir, as loyal and patriotic Americans, spend more time than is allotted to us in reviewing your magnificent administration, its fruitful and beneficent results, and commend you for the unflinching courage and admirable patriotism shown in administering to the affairs of the nation. Twice in as many years have you called the national Congress to assemble in extraordinary session that it should do its plain duty by the people and enact legislation that it had failed to pass in ordinary session. It would be a superlative pleasure to review at length the many things which you have done for your fellow citizens at large, and which have caused you to be acclaimed by the foreign press as having done more to make possible international peace than any of your illustrious predecessors or contemporaries.

But we are only a lot of doctors, interested but untrained in matters of state, devoted to our profession and grateful to all who have lessened human suffering and have, by the opportunity offered by public station, inspired and enabled us to do better work in the line of our calling. No one, sir, has shown a greater appreciation of what American medicine has done, and can do, than yourself. Every official act as governor, secretary and President, affecting matters medical, has demonstrated your comprehensive and judicial grasp of the question under consideration.

The 8,000,000 inhabitants of the Philippines can never forget that you gave them educational, administrative and commercial advantages hitherto unknown to them; but, better than these, you, by a wise administration, gave them health by encouraging the study of tropical diseases, which has practically put an end to devastating epidemics of cholera and plague; and by segregating all lepers on the Island of Culion leprosy will eventually be stamped out. The hospitals of Manila are splendidly equipped, admired by all who visit them, and must ever remain as a monument to your constructive genius. In your brief administration in Cuba that troublous and turbulent people were quieted as if by the magician's wand. There you nationalized sanitation by causing to be created a department of health with representation in the cabinet. Formerly a perpetual menace to this country's health and commerce, Cuba is now visited by thousands as a winter health resort.

But greater than this was the work wrought on the Isthmus of Panama by the Medical Corps of the Army under your orders as secretary of war. This zone, for many years so inhospitable to human life that it was abandoned by the French, is now as healthful as Washington or Philadelphia. A work is there progressing, with a pace which almost staggers the imagination, that must, when finished, increase our importance as a world power, double the efficiency of our Navy and add countless millions to our commerce. Congress and the nation support you almost solidly in your insistence that so important, so costly, so strategic a position should be fortified. To do less would be to indulge in iridescent dreams that the day of universal peace—indeed, the millennium—were at hand.

But I should say that your greatest work, so far as our profession is concerned, was your urgent insistence in both of your annual messages to Congress that all of the governmental forces, outside of the Army and Navy, should be coordinated into an effective whole, and made into a Bureau or Department of Health. This the American medical profession has wanted, advised and worked for at least a quarter of a century; but you, sir, are the first president who has both recognized that it should be done and courageously insisted on it.

Much more could be said, but the proprieties of the occasion require that I should give way to one whom every body has come to hear. "Nothing can cover his high fame but Heaven." Therefore, gentlemen of the club, I wish to present you, your guests, and this magnificent audience to the President of the United States.

Address of President Taft

PRESIDENT TAFT arose amid cheers and, after the demonstration had subsided, said, in part: The "City of Brotherly Love" is one of the most important medical centers in this country. When, therefore, this Medical Club invited me to attend one of its meetings I gladly accepted, because it seemed to me that if I had any message to the medical men of the United States I could not find a more favorable place to deliver it than here.

Since 1898 and the Spanish war the people of the United States have been a colonizing and colony-holding people. We have become responsible for the welfare of Cuba, Porto Rico, the Isthmus of Panama and the Philippines. We have had under our care and guardianship the hygiene and the health of tropical peoples, and, while I should be the last one to minimize the importance and value of the benefits that we have conferred on the inhabitants of the tropics thus coming under our government of a political and economic and educational character, I do not hesitate to say that we have been most distinctly successful in the measures we have adopted, maintained and enforced for the improvement of the health and physical condition of these peoples in the torrid zone, over whom we have assumed guardianship.

It is not too much to say that the prevalence of yellow fever in Cuba and its constant recurrence as an epidemic in Havana and other cities of that island, so near to our own shores, threatening death to our own southern cities, was one of the chief causes, and, I may add, one of the real justifications for the popular feeling that led to the Spanish war. Hence it was that no sooner did we take Cuba, to bring it under our control, then the most strenuous efforts were directed toward cleaning it up as a pest-hole and changing its character as a neighbor dangerous to health.

The same task fell on us in assuming possession and control of Porto Rico, in undertaking the government and improving the conditions in the Philippines, and finally in the preparation of the Canal Zone for the construction of the canal. In the first three of these tasks of hygienic reform the control of governmental methods devolved in the first instance on the Army, because the early governments were all military governments. In consequence the health regeneration in these three colonies became the work of the Medical Corps of the Army; and so well was it performed that when the necessity for cleaning up the Canal Zone and making it healthful became apparent we took a member of the Army Medical Corps and put him in charge.

THE SANITARY REGENERATION OF CUBA AND PORTO RICO

It was while we were in Cuba that Walter Reed, an army doctor, investigated and verified the correctness of the theory announced some little time before, that the germ of yellow fever was conveyed from one human being to another by a certain species of mosquito. This discovery revolutionized the method of treating yellow fever, and it was made clear that the great effort and expenditure of money required to clean up Havana and the other infected towns, while useful in the prevention of other diseases, had little or no effect to prevent yellow fever. An entirely different course of procedure had to be followed. It was adopted in Havana and the other cities of Cuba, and was most successful; and one of those officers engaged in the work was Colonel Gorgas, of the Army Medical Corps.

Then we took over Porto Rico. We found that in that island the people were not suffering so much from yellow fever, but there was what was called "tropical anemia," and it was not long before an army doctor, Bailey K. Ashford, discovered that this was not the result of starvation and the absence of nutritious food, but was a disease due to the presence in the intestines of the so-called hookworm, and that it yielded to treatment, and that the many deaths and the general disability that the hookworm produced in the people of Porto Rico could be avoided in the future by comparatively simple and specific treatment. Half a million people have been the recipients of this treatment and have recovered, and a second campaign is now being planned of greater thoroughness, preparation and practice, which will doubtless rid the island of this disease.

THE TASK OF SANITATION IN THE PHILIPPINES

In the Philippines we did not encounter yellow fever, for that as yet had not reached the Pacific; but we found there, in glorious exuberance, cholera, bubonic plague, beriberi, malaria, small-pox, amebic dysentery and leprosy. By improving the water-supply and introducing mountain water into Manila, at a cost of $2,500,000, and by the introduction of artesian wells in many of the towns and villages of the interior, by regulations as to the food-supply, by a new sewage system in

Manila, costing $2,000,000, and by regulations securing the proper and safe disposal of sewage in the smaller towns and villages, and by the use of inoculation with cholera lymph, we have greatly reduced the number of victims from cholera in those islands. By a wholesale vaccination of all the inhabitants of the Philippines, carried on carefully and rigorously, we have practically stamped out small-pox of all kinds in the islands, in which the black small-pox of the most virulent type, flourished before our coming. By a crusade against rats and a cleaning up and destruction of the foci of the disease we have taken all the terrors in the Philippines out of bubonic plague. By careful attention to the destruction of the mosquito we have greatly moderated the injurious effects from malaria, and, while amebic dysentery continues to be a most dangerous and lingering form of disease in the Philippines in many cases, if treated in time it is subject to the control and cure of the remedies discovered and adopted there.

When we went to the Philippines lepers were at large. There were leper hospitals in Manila, in Cebu and in some other parts of the country, but the horrible and sickening character of them beggars description. We have segregated the lepers in all provinces in the islands to the number of 4,000 and have taken them to Culion, a beautiful island in the southern seas, have given them almost a self-governing colony and have made them so happy and comfortable that we have now no difficulty in inducing all persons afflicted with this disease to join the colony. The effect of this segregation has been to reduce the new cases annually of leprosy to 16 per cent. of what they were formerly.

One of the most obstinate and difficult diseases in the Philippines, and, indeed of the whole Orient, has been what is called "beriberi." For a long time the cause of it was beyond our discovery. But now it has been definitely traced to the use of polished rice as food. I need not go further than to say that 24 per cent. of the Japanese army were afflicted with beriberi during the Russian-Japanese war. The change of this food from polished to unpolished rice has practically stamped out the disease in the Philippines. This is a discovery since I left there, and I speak of it without practical knowledge, but only on report, but I know that the disease was under examination by the expert pathologists and investigators during my entire stay in the Philippines, and that the present discovery is only in keeping with the progress and success made in every other direction in the official inquiries made into the causes of tropical and Oriental diseases and their cure.

I may add that the investigations which have been made by our physicians into the character of the intestines of the native Filipinos indicate that those intestines are, if I may so say, a veritable "zoologic garden" of germs, microbes and bacilli that greatly enfeeble the race, and that by proper treatment might be eliminated, and the constitutions of the people at large greatly strengthened; and in the course of our stay in the Philippines I doubt not but that this method of strengthening the race will be pursued with greater and greater success.

SANITARY ENGINEERING IN THE CANAL ZONE

With all this experience, secured by our army doctors and those civilian physicians who followed them in Cuba, Porto Rico and the Philippines, we came to the problem of the construction of the Panama Canal, in a region as pest-ridden as any on the face of the earth. It is not too much to say that yellow fever and malignant malaria, known there as the "Chagres fever," contributed more than any other one cause to the failure of the French to build the canal; and when we went to the Zone to begin operations we found there lingering and ready to offer the same obstacles up to that time so fatal to success in this great work; but the Spanish war and the responsibilities it had thrust on us had given such light on the method of meeting and reducing these obstacles that we have finally swept them away. It took two years for us to make the necessary preparations before we could begin the work of excavation and construction. Those were a hard two years, with thoughtless critics demanding when the digging was to begin, criticizing every effort made and prophesying a dismal failure of our work. But we had selected as our medical officer a man who had acquired his knowledge in Havana and had practiced the new remedies there, and, with the resources of the government at his back, Colonel Gorgas changes a pest-ridden zone into a district as free from disease as any of the states of the south. He stamped out yellow fever so that for now more than four years there has not been a case on the Isthmus, and he reduced the malignancy and extent of malaria on the Isthmus to such a point that the percentage of deaths in the foreign population in the Zone is considerably less than in our large cities. He has made the Zone a pleasant place and a healthful place to live in. This great work of construction goes on without thought now of the dangers which made French success impossible.

Is not such a record one on which we can dwell with the utmost national pride? Does it not speak marvels for American courage, energy and scientific thoroughness, skill, research and power of original discovery? Other countries have been in the tropics for nearly two hundred years, and yet I do not think it an exaggeration to say that in the short twelve years that we have been responsible for the health of our peoples in tropical climates we have made more progress in the discovery of methods of prevention and cure for tropical diseases than all other countries have made in those two centuries.

OTHER SANITARY ACHIEVEMENTS

And now we have a division of 18,000 men in Texas and California. They have been there for two months living under canvas and in a country soaked with rain and deep with profanity-provoking mud. But so effective have been the regulative and preventive methods adopted to reduce sickness that the percentage of sick men is less than it was in the posts from which these men were mobilized. I need not recall the dreadful record of sickness from typhoid fever in the camps at Chickamauga and other camps established during the Spanish-American war. The percentage of typhoid cases was so high that it is hard to believe. Of 120,000 men there were twenty thousand cases, with a case mortality of 7 per cent. Of the volunteer regiments mobilized during the Spanish-American war 90 per cent. became infected with typhoid fever within eight weeks from the date of mobilization. To-day, two months after mobilization, with the modern health regulations and by the use of vaccination against typhoid, not one case of typhoid fever has appeared in the entire force, except that of one teamster, who was not vaccinated. It is hard to credit the accuracy of such a record. But, as I have it directly from the war office, I can assert it as one more instance of the marvelous efficacy of recent medical discoveries and practice.

When we consider how in times past the efficiency of an army has been reduced by large percentages through disease we can realize what an important part of the army the Medical Corps has become. But, without reference to war, when we consider the enormous advances made in the discovery of methods of preventing disease in the tropics, by members of the Medical Corps and under government auspices, and all within the last thirteen years, I think we may take pardonable pride in the record.

We expended many lives and much money in the Spanish war and in the discharge of the responsibilities that have followed that war. But they are as nothing compared with the benefits to the human race that have already accrued and will continue to accrue from the discoveries made under the conditions and necessities which the exigencies of that war and the governmental burdens following it presented.

I congratulate the Medical Corps of the Army, I congratulate the medical profession at large (for these discoveries were not all made by army doctors), that they have had the opportunity, and have seized it, to make such progress in relieving the suffering of the human race and in becoming, in so conspicuous a way, the benefactors of mankind.

Following his address President Taft was made the first honorary member of the Medical Club of Philadelphia, his certificate of membership being handed to him by Dr. Rodman.

DR. RODMAN, introducing Dr. S. Weir Mitchell, said: It is fitting that the President of the United States should be followed by the most distinguished and widely renowned physician in America, one who shares with Lord Lister of Great Britain, the mother country, the honor of being the world's two most famous medical men. We should felicitate ourselves, Mr. President, on the fact that the English-speaking peoples have given to science the greatest living physician and the greatest living surgeon. Not only does the gentleman I shall next present represent the noblest, the most cultured, the most ethical sentiments of American medicine, but he is your friend and former host, and the *beau idéal* of the Philadelphia profession. It gives me great pleasure to present —he needs no introduction—Philadelphia's most illustrious citizen, the eminent physician, the medical author, the historian and poet—"a man so various that he seems to be not one, but all, mankind's epitome"—S. Weir Mitchell.

The Debt of the Country to Physicians

DR. S. WEIR MITCHELL, Philadelphia, said, addressing President Taft: It is pleasant as citizens of the world to congratulate you and ourselves on your endeavor to establish arbitration and promote peace between the two great branches of the English-speaking race; nor could there be a more fitting occasion to remind you, and through you the people of this country, how deeply they are in debt to the American physician. For us this occasion is eloquent of opportunity. Your own profession of the law owes to you the illustration of judicial appointments where the only partiality shown was for ideal fitness and the possession of personal qualities such as your own life on the bench and at the bar has amply exemplified.

I said, sir, just now, that the country was in our debt. I would like to add that the country is of late more heavily than ever our debtor. We owe it to you, and I may add in part to your energetic predecessor, that you have given to the members of our profession who represent us in the ranks of the Army the first chance in the history of the world to prove what the intelligent despotism of educated discipline can enable the physician to effect for mankind. The chief of staff of the Army, General Leonard Wood, once—and he says "always"—a physician, with a group of young surgeons, swept the yellow-fever plague out of Cuba and freed the world from this terrible scourge; alas, at what sad cost! They cleared the island also of malaria and there and in the Philippines put an end to small-pox. You, sir, well know that it was Colonel Gorgas and his staff who have made so swiftly possible the gigantic engineering surgery which will have cleft the Isthmus of Panama from sea to sea. This was our opportunity; it was unique; and I beg to remind you, sir, and my fellow physicians, with pride, that our use of it was an unequalled display of hygienic competence.

You, sir, may not recall as I do what we did in the great war which welded the states into one. North and south the physicians remained an undivided guild in the service of humanity, while churches and the state were rent asunder. What our brothers in the south lost we do not know. We, ourselves, lost in battle 51 killed and 83 wounded, and 283 who died from disease. We have asked, sir, no reward; neither pensions, places, ambassadorships, nor even presidencies, have been for us. No memorial speaks of these great services; our dead are unrecorded in the annals of the war. The land is populous of statues of private and general; there remains for us the unrewarded consciousness of duty simply done in obedience to a creed old before Christ had spoken His great message to the world. You are, of course, aware that after a great victory general or admiral had sometimes been rewarded by the thanks of Congress. Is it too much to expect that when our flag leads a procession of the navies of the world through that great canal, Congress will commemorate the event by thanking, in the person of Colonel Gorgas, those who have read mankind a lesson in sanitary efficiency and for whom no other reward is possible? Again, Mr. President, accept our thanks for the latest chance to read into action our creed of duty.

We have been in the past nobly equal to every task laid on us, and, perhaps, sir, we may hopefully look forward to seeing in some future cabinet a secretary of health, who will enable us to do on a larger scale what we have so admirably effected in the far-sown islands of the sea.

DR. RODMAN, introducing Dr. William H. Welch, said: It is now the highest honor that can come to one of our profession to be chosen president of the national Association. Thrice on the Lupercal did Caesar put aside the crown offered by Mark Antony, but, it is said, each succeeding time more gently than before. It is within the knowledge of many here that he whom I shall next present, and who is now the honored president of the Association had, before his election, more than thrice put the crown from himself, and in a way that left no one to doubt that this gentle, wise and excessively amiable man could, when necessary, be as impregnable as Gibraltar itself.

I unhesitatingly declare that he has done more for American medicine than any medical man since Samuel D. Gross; for while possessing an unusual gift for conceiving and directing "big things," he has not been tied down by the exactions inseparable from private practice. Therefore has he conceived and directed great clinical hospitals and experimental laboratories, and has been the chief inspiration to more medical teachers and molders of thought in various cities and pathological laboratories of America than any living man. To-day he is in the Hopkins School or Hospital, in Baltimore; tomorrow, in the Rockefeller Institute in New York; and the next day, directing the Foundation in Washington; leaving on the midnight train for Chicago to run the American Medical Association. I introduce to you Dr. William H. Welch.

The American Medical Association

DR. WILLIAM H. WELCH, president of the American Medical Association: The city of Philadelphia has had a large share in making the medical history of this country. To-night it is contributing an event unique and memorable in the reception by this medical club of the President of the nation as its guest of honor. This is an event in which the whole medical profession of this country cannot fail to rejoice and take pride, and I esteem it a high privilege, Mr. President, to be permitted to offer to you, in behalf of the American Medical Association, our cordial greetings and best wishes, and to express to you our profound appreciation and great pleasure in the honor conferred by your presence on this occasion. Permit me especially to express the appreciation and thanks which I am sure all physicians in this country would desire me to offer for the inspiring words which you have spoken and for the fine tribute which you have paid to the work of members of our profession in our colonial possessions. Your voice will carry to the larger public that record of achievement which should be a source of pride to the whole country and to the world.

The American Medical Association, with an actual membership approaching 40,000 and with a much larger potential membership, represents the organized medical profession of this country. During the sixty-five years of its existence it has been a great unifying force, which has reflected the conditions and the progress of American medicine. By improving medical education, by inculcating high standards of professional conduct, by favoring the enactment of beneficial medical and sanitary laws, by protecting physicians and the public from frauds, by promoting the science and art of medicine, by preaching the gospel of public health, and in various other ways this Association has rendered important service, not to the medical profession alone, but also to the people as a whole.

The great conquests over disease which have been set forth to-night so clearly and fittingly by the President are wholly the result of a remarkable extension of our knowledge during the last three decades into the nature and causes of the infectious diseases, which are the diseases of the greatest racial and social significance to mankind. At no previous time in the world's history could such a record of triumphant achievement have been attained. It is in the power of man to control to-day great pestilences, such as yellow fever, cholera, pernicious malaria and the plague, and even more devastating, although from their familiarity less dreaded diseases, such as tuberculosis, typhoid fever and infantile diarrhea, because Koch and Pasteur and Ross and Reed and a host of workers in the new fields of bacteriology have discovered how these diseases originate and spread, and have thereby placed sanitary practice on a rational and scientific foundation. It is immensely gratifying that our country has been able to furnish to the world the most striking example in the history of preventive medicine of the conquest of a great scourge by the extirpation of yellow fever through the discoveries of Reed, Carroll and their colleagues of the Army yellow fever commission and the practical application of these discoveries by Colonel Gorgas—all names of undying fame. These, as well as all of the discoveries in this domain, are triumphs of the experimental methods of research.

We know that you, Mr. President, in your administrative duties in the Philippines, in Cuba and on the Isthmus, have been brought into close touch with this life-saving work of physicians and sanitarians, the results of which, as you have authoritatively stated, constitute the greatest of our services to the peoples of these possessions, and we know also that you have aided and furthered this work in important ways by your advice, cooperation and sympathy. I desire on this occasion, on behalf of my colleagues of the medical profession, to pay tribute to the great services which you have thus rendered, and to the intelligent and sympathetic interest which you have repeatedly manifested by word and by deed in the cause of public health.

Public hygiene and preventive medicine have acquired an economic and social significance among the organized forces of civilization but little appreciated to-day by the general public or by legislators and administrative officers of government. They occupy a field quite apart from systems and schools of medical practice. The great International Exhibition of Hygiene, which has just been opened in the city of Dresden, affords an impressive demonstration of the methods and results

of public health administration and activities, and of every kind of effort in the conservation and promotion of the health of the peoples of the world. It is deplorable and greatly to our discredit that of all the civilized nations of the world ours is the only one not officially represented in this international exhibit. We have, however, an opportunity to make partial amends for this slight dereliction by adequate governmental support and vigorous efforts in behalf of the success of the International Congress of Hygiene and Demography to be held in the city of Washington in September, 1912, on the invitation of our federal government.

It is a remarkable and significant fact that in order to make an impressive showing of what our country has done for public health we have to pass beyond the boundaries of this broad land which we inhabit and tell of what we have done for the peoples of distant islands and on the Isthmus of Panama; and it is true that our nation has organized better for scientific and practical sanitary work in these possessions than it has done at home.

We have a few highly efficient municipal and state departments of health, but we should have many more. The contributions of the Massachusetts State Board of Health to the principles of purification of public water-supplies and of sewage disposal, and of the New York City Department of Health to the administrative control of tuberculosis are recognized everywhere as of the highest importance. The state of Pennsylvania is setting the pace for the rest of the country in liberal support and efficient conduct of its department of health.

The activities of the Public Health and Marine-Hospital Service, our chief national health agency, have greatly improved and extended in recent years on both the scientific and the practical sides, but a larger and better plan of organization of our federal health agencies is urgently needed.

The health of the people is the greatest asset of the nation and should be the first consideration of governments. The interest of medical men in this subject differs in no respect from that of the rest of the community, nor is this interest longer confined to the medical profession. It is incredible that any one who has any realization of the suffering, inefficiency and enormous waste to the country resulting from preventable disease and insanitary conditions of living and of work can fail to appreciate the incalculable benefits to our people which would accrue from larger hygienic activities of the national government in ways entire consonant with our form of federal government and within the proper scope of such government.

Did our federal government not fall so far short of its plain duty in the way of promotion of public health, we should find here at home records of as beneficent achievement as those which have been cited from distant lands, and our own people would reap the full benefits of that ever-advancing knowledge of disease and its prevention, which carries its messages of hope to mankind.

DR. RODMAN, introducing Dr. Charles A. L. Reed, said: We have heard from the distinguished President of the American Medical Association, who has told us of its achievements and its purposes. I shall next present a man who had much to do in making the Association what it is, for it was under his presidency that the epoch-making reorganization occurred. A Cromwell was needed and the alert, the lion-hearted, the determined president of 1901 was equal to every constructive and parliamentary emergency at the meeting in St. Paul.

Moreover, he, as Chairman of the Committee on National Legislation, has served not only the profession, but the public in a way that few appreciate. As a member of the committee for ten years, together with the distinguished gentleman who has just spoken, I know something of the splendid work he has done in bringing about necessary and wholesome changes for both profession and public.

Although living in the Middle West and carrying on an extensive practice, he never hesitated to go to Washington when the call of duty was sounded. He recked not whether it was the Army reorganization bill, the pure food law, or the Dodds bill under consideration. He was always there and his presence was an inspiration to his followers, and a dismay to opponents.

I present to you the Queen City's best-known surgeon and author, the fellow-townsman and admirer of our distinguished guest—"one not in the rôle of common men"—Charles A. L. Reed.

National Medical Legislation

DR. CHARLES A. L. REED, Cincinnati: The Medical Club of Philadelphia stands for much in this country. It typifies not only fraternity, organization and effective ultraism, but shows the strength and vitality of the present-day movement, not only to lengthen but to broaden and to make happier the span of human life. That movement is fortunate in having here tonight such a leader as President Taft has shown himself to be. As Governor-General of the Philippines, he established medical education on a governmental basis in that country. As Secretary of War, as I happen to know, he cut the bands of red tape that officious officialdom had wrapped about Colonel Gorgas and that were hampering him in the very sanitary administration that alone has brought the great engineering achievement at the Isthmus within the range of possibility. So with the sanitation of Cuba, the reorganization of the Medical Corps of the Army, the enforcement of the pure food law and the development of the great Red Cross organization, President Taft has shown himself the actual leader in the very movement in behalf of the people to which movement alone the medical profession stands consecrated.

What shall be the next forward step? What are some of the conditions to be met? The people of this country are dying from preventable causes alone at the rate of more than one a minute. This is an impressive fact whether viewed from an economic or humane standpoint. It is likewise impressive that Congress has failed to furnish an adequate national mechanism to assist in staying this havoc, a havoc that is equivalent five times over, to the death every year of every officer and man in both the Army and Navy of the United States. It is true that we have some public health agencies scattered throughout five departments of the Government and it is likewise true that each of five members of the Cabinet takes a whack at being national health officer. This, of course, is all very absurd and, as I know from personal investigation in Europe only last summer, it makes us the laughing-stock of the world. But Congress seems to be destitute of pride as it appears to be destitute of interest in this subject. It seems to be sorely afflicted with constitutional lawyers who have been authoritatively defined by President Taft as lawyers who have ceased to be lawyers and gone into politics. These wiseacres seem to think it constitutional for the government to educate the people to protect swine but not to educate them how to protect themselves against disease. They seem to think it incontestably constitutional to control interstate commerce but entirely unconstitutional to control the sanitation of that commerce; or, in other words, they assume that the healthfulness of an interstate commodity is no attribute of that commodity at all. They concede that the government can and does exercise jurisdiction over the navigation and commerce of interstate waterways but contend that it has no right so to regulate the sanitation of such waterways as to make such navigation and commerce possible. In the Ohio Valley we have a thousand miles of river and a thousand miles of typhoid; from which it would seem to be entirely constitutional for the United States to use its streams for the dissemination of disease and the destruction of the people.

The derelictions of Congress in dealing, for instance, with the plague condition in this country cannot be hidden by its surreptitious expenditure of a half million dollars epidemic fund every year in fighting conditions many of which ought never to have become established. I could lengthen this indictment against Congress by giving you a fresh count every minute for an hour. It is enough to say that for every one of the more than 600,000 deaths from preventable causes in the United States every year each member of Congress has a certain measure of individual responsibility. The sooner he is made to feel that responsibility and feel it by votes of the people, the better. As the President has just stated, clearly the next step forward must be a more highly evolved national health service. Whether "department," "bureau," "commission" or "board" it should be so constituted that every available agency and every branch of modern science shall be brought to bear in solving the complex problem of human health and human efficiency.

DR. RODMAN, introducing Surgeon-General Stokes, said:

The sister service, the Navy, is in every sense the equal of the Army—they cannot be dissociated—and by its ability, its chivalry and cosmopolitanism, has so maintained the credit of our country in foreign lands as justly to cause it to be one of the chiefest prides of the American profession. No wiser and better administrative act was ever done than that which placed medical officers in command of hospital ships. If hospital ships are necessary, and assuredly they are, who else can so well command them as well equipped surgeons? We have with us to-night one who commanded the hospital ship *Relief* in the now famous cruise around the world. He originated a war plan which adds to the military efficiency of the fleet, attends to the humanities of battle, and bids fair to revolutionize some features of naval warfare. The judgment he displayed, together with his executive ability

and charming personality, caused him to be promoted to the honorable post of surgeon-general—a position that he now adorns, and should for many years adorn. "He has a head to contrive, a tongue to persuade and a hand to execute."

I take great pleasure in presenting one, who, though surgeon-general and holding the rank of admiral, likes to be called plain doctor—Charles F. Stokes.

The Sanitary Organization of the Navy

DR. CHARLES F. STOKES, Surgeon-General, U. S. N.: With the exception, possibly, of medicine and surgery, no branch of science has been more completely revolutionized than that of naval warfare. Not only has this great change been effected in ships and personnel, but in spirit and aims. Spars, sails and wooden hulls have given way to the grim monsters of steel that carry our flag to-day. The change in the personnel has been almost as radical. The agile, cat-like top men, of the age of spars and masts, have been replaced by the seaman-mechanic, the gunner-mechanic and mechanics of other sorts. The muzzle-loading rifle, of decidedly indifferent effectiveness, has given way to the high-powered breech-loading rifle with smokeless powder, and a projectile of almost a ton of metal. Instead of, as in the past, having its field of usefulness limited largely to the treatment of sick sailors, the Medical Department of the Navy, to-day stands side by side with the fighting branches in adding to military efficiency and all that has to do with making the winning of battles possible.

You physicians in civil life are giving considerable attention to the so-called occupational diseases. Those diseases have been for a long time the subject of careful study by naval medical officers, not on economical and humanitarian grounds, as they would interest you, but on the score of pure military efficiency; for example, the solution of the problem of sustaining life in disabled submarines is a complex proposition. It is something more than simply generating oxygen and removing carbon dioxid; it has to do with the so-called fatigue-poison, hydrogen given off by batteries, the gasoline emanations, and so on. The men who manipulate the search-lights must be screened from actinic rays, otherwise their sight is seriously damaged. Ears must be prepared for and protected against the blasts of gun-fire. The contjnuous use of telescopic sights by gun-pointers frequently leads to serious impairment of vision. It is on these men that we must rely for accuracy of fire. The constructors may give us stable battleships, the ordnance officers high-powered rifles, and the commanding officers may maneuver the ships with consummate skill; still, if the men who point the guns cannot see straight, we are not going to have hits, and the outcome of battle may hinge on this remediable defect.

An ophthalmologist of recognized ability is studying the vision of gun-pointers in the Atlantic fleet, and without doubt the crippling effects of this industrial disability will be averted and military efficiency thus very materially advanced.

Sanitation has made the building of the Panama Canal possible; with the completion of the canal the field of operations of the battleship fleet will be practically doubled; in other words, the Atlantic fleet will be placed within striking distance of the Pacific and conversely the Pacific fleet will become effective in the Atlantic. No more impressive demonstration of the value of sanitation to a military establishment could be pointed out.

Any war plan which fails to take into consideration the sanitary features of the problem—the term sanitary is used in its broadest military sense—and to benefit by the best advice obtainable along these lines, should be cast aside as incomplete and likely to break down under actual battle conditions. Such a plan, must, of necessity, be one-sided. Until recently the Atlantic fleet was so organized that, had it gone into battle, the breakdown in the medical department would have been one of the most appalling in history. This condition of affairs was the result of a one-sided development. The awakening of a new spirit in the Navy Department, one of coordination and cooperation, in other words team-work, with military efficiency as its prime object, has made the solution of this problem possible. It is perfectly plain that medicine and surgery, by virtue of what they are doing and have done to promote military efficiency, stand in the front rank of the fighting arms of the nation to-day, and any attempt unduly to subordinate them or to deprive them of the recognition that is their due should be combated to the bitter end.

If the regulations or the laws make it impossible to put into operation effective organization and administration, then the laws and regulations must be changed to meet the new conditions. If these conditions of naval warfare have been such as to relegate to oblivion wooden ships, sails and spars, and with them much of the romance of the sea, then there should be no hesitation in casting aside cherished traditions, often clung to tenaciously for the sake of these traditions themselves, to make way for practicality and effective accomplishment. Responsibility should be recognized by appropriate rank and in this, as compared with foreign navies in all branches of the service, there is much to be desired.

The watchwords of the Navy Department to-day—and these watchwords have been instilled into us by our illustrious Commander-in-Chief—are, first and foremost, military efficiency, to be accomplished by coordination and cooperation, team work, close scrutiny of expenditures, the avoidance of needless waste; in other words, effective practical economy. Organized along these lines it is safe to say that the Navy will give as good an account of itself in the future as it has in the past, and its very preparedness will make it a potent factor in maintaining peace.

DR. RODMAN, introducing Surgeon-General Torney, said:

There is no abler, more representative, more patriotic a body of soldiers on the face of the earth, whether in peace or on the firing line, than the Medical Corps of the United States Army. It has not only demonstrated this ability and patriotism in times of war, when almost superhuman strength and courage were necessary to attend properly to the large number of wounded entrusted to its care, but it has done even more in peace, by demonstrating the cause of yellow fever and malaria, and ameliorating the terrors of each. The heroic and self-sacrificing experiments of Carrol, Reed and Lazear can never be forgotten either by their medical confreres or humanity for whom they died.

The Medical Corps of your Army, Mr. President, made it possible to build the Panama Canal after others had signally failed in this audacious and world-astounding enterprise. It was placed in such command, sir, by your orders as secretary of war. Its work has been characterized by Dr. Mitchell as "engineering surgery," and so successful was the operation that Colonel Gorgas, the operator, was unanimously elected President of the American Medical Association.

We have with us this evening the distinguished head of this corps, a man, "modest, kindly, all accomplished, wise." I now call upon and introduce to you that surgeon, soldier, gentleman—General George H. Torney.

Sanitary Progress in Fort and Field

DR. GEORGE H. TORNEY, Surgeon-General U. S. A.: Of the records of the history of our country there are none more interesting than those of the Medical Department of our Army. It began at the siege of Boston in 1775. Without going into details it will suffice to state that no adequate provision was made for its administration until it was forced upon Congress by General Washington, because of the large morbidity and mortality rates amongst the troops of the Revolutionary Army.

At the end of the Revolutionary War the Army was practically disbanded, and its medical department went out of existence. After the War of 1812 there was a reorganization of the Army, but in this reorganization the Medical Department received scant consideration.

Engaged in that war was Assistant-Surgeon Beaumont, who was destined to make his name in the medical history of his country. In 1822 Alexis St. Martin, of whom you have all read, suffered from a wound of the stomach, which was finally cured, leaving a fistula. Fortunately for science he fell under the care of Surgeon Beaumont and when in 1825 the wound of the stomach of Alexis St. Martin had healed, Surgeon Beaumont began his experiments in the study of the physiology of digestion. In the light of history Beaumont should be given the credit as the first scientific investigator in physiology in our country. For it was he who instituted and carried out his investigations with all the acuity so well illustrated by modern methods. His work will endure forever.

The Mexican War brought to the Medical Department of the Army a grave responsibility in the care of the sick and wounded, and also the management of epidemics in a foreign land, and those of you who have had experience in this work will appreciate the labor involved in the solution of such problems. In this connection it must be remarked that the medical department of an army on a peace basis is inadequate in personnel for war, and this statement applies to all other armies as well as our own. The very suggestion for adequate provision of the medical department of an army seems to appall the administrative authorities of the service.

When the Civil War began the Medical Department of the Regular Army was small in numbers, and on it was thrust the medical administration of a vast army which, through the early part of the war, could not be made efficient because of inadequate personnel and lack of appreciation of its needs.

The Civil War developed Jonathan Letterman, a surgeon of the Army, of whom but a few of you have heard, but whose name stands out most prominently in the medical history of the War of the Rebellion. It was he who organized and administered the Medical Department of the Army of the Potomac under a system which was adopted by other armies in the field. There was much opposition to his policy of administration, but the War Department and Congress ultimately recognized its merit.

At that period the Medical Department had frequently 80,000 patients under its care. Exceptionally these numbers ran over 100,000, and in one instance 120,000 patients. To-day Letterman's system for the administration of the medical affairs of the Army of the Potomac has been adopted as original by the military authorities of Europe without credit to its author, and with no mention of the United States.

After the termination of the Civil War the medical and surgical history of the War of the Rebellion was written by the officers of the Medical Department of the Army ,and to-day it stands as a monument of the industry of the men who engaged in this work. At the same time was begun the Index-Catalogue of the Library of the Surgeon-General's Office. At first it was a pamphlet of twenty small pages; to-day it is the greatest work of its kind in the world.

From the end of the War of the Rebellion to the beginning of the Spanish War, the Army of the United States was occupied in subduing the hostile Indians on what was known as the frontier. In these wars the officers of the Medical Department were fully engaged with their brothers of the line and exposed to the same dangers. At the outbreak of the Spanish War the personnel of the Medical Department was inadequate in numbers for the care of its own sick, and the sudden increase in the volunteer forces, for which no adequate provision had been made, added to its burden.

During this war a board composed of Vaughan and Shakespeare of the volunteer forces and Reed of the regular Army investigated the epidemic of typhoid fever which prevealed in the volunteer Army. The conclusions of this board are valuable to our profession. It is my belief that it proved that typhoid fever is a contact disease in the majority of cases.

After the Spanish War investigation was immediately begun in the study of tropical diseases, which resulted in proving by the board of which Walter Reed, surgeon, United States Army, was the directing head, that the mosquito is the intermediate host for carrying the infecting toxin of yellow fever. Of the brilliant results that followed this investigation you all know. It was due to this discovery that Gorgas, in Cuba, was enabled to stamp out yellow fever, and on his transfer to Panama, as chief sanitary officer, following the same methods to prevent the development of the disease on that Isthmus. It was this discovery, also, that enabled Kean of the Medical Corps of the Army, in Cuba in 1906, as chief sanitary officer of that island, to stamp out yellow fever after it had recurred in that island; and by his efforts to establish a department of public health which is to-day a model for the world. Measured in terms of money it is estimated that the discovery by Reed has already more than paid the cost of the Spanish War, the Philippine War and of the construction of the Panama Canal. I wish also to mention Ashford of the Medical Corps of the Army, who in 1902 began his investigations in Porto Rico as to the cause of the anemias among the inhabitants of that island. His report, with Dr. King of the Marine-Hospital Service, that the hookworm was the parasite that causes a large percentage of disability in tropical countries, was published in 1904.

To-day the Army Medical Department is engaged in an antityphoid campaign for the prevention of that dread disease. This campaign has followed the work of the typhoid board, composed of Musser, Thayer, Lambert, Vaughn, O'Reilly, Russell, Councilman and Flexner. To-day, in Texas, there is a division of the United States troops, every man of which is vaccinated against this infection. In that division not a single case of typhoid fever, which is the disabling disease of armies, has occurred. In the Spanish War typhoid fever developed in 90 per cent. of all the regiments within eight weeks after their organization.

I hope that the import of this statement will be fully impressed on you, since, from a medical point of view, this is history.

Tropical Medicine.—The eighth annual meeting of the American Society of Tropical Medicine will be held in New Orleans, May 18-19, under the presidency of Dr. William S. Thayer, Baltimore. The society will be the guest of the Orleans Parish Medical Society and part of the sessions will be held in its new building. At the morning session on May 18, held in this place, the president's address will be given and papers on malaria will be read. At the afternoon session, held in the Richardson Memorial, Tulane Campus, leprosy will be the topic. On the morning of May 19 there will be a clinic on pellagra at Charity Hospital, and at the morning session, held in the Hutchinson Memorial, Tulane Medical Department, there will be papers and a general discussion on amebiasis. The afternoon session at the same place will be devoted to the election of officers and members, and to papers on pellagra, yellow fever, snake poison, etc. An excursion to the Louisiana Leper Home has been arranged for May 20. The committee of arrangements extends a general invitation to all who are interested and requests those who are coming to notify the chairman, Dr. J. Birney Guthrie, Suite 602, Perrin Building, New Orleans.

LONDON LETTER

(From Our Regular Correspondent)

LONDON, April 29, 1911.

Proposed Compulsory Opening of Windows

The antituberculosis campaign has had great effect in educating the public as to the importance of fresh air, and windows are now kept open to an unprecedented extent. But the compulsory opening of windows is a step which the most ardent hygienist would not dream of advocating in this country, in which the liberty of the individual is valued so highly and the house has been called the "Englishman's castle." However, the health committee of the Paddington Borough Council (one of the metropolitan boroughs) has recommended for adoption the following new by-laws for tenement houses: "It shall be compulsory for all windows of sleeping apartments to be opened wide for at least two hours a day, and for floors to be swept once a day and washed once a week." It is proposed to appoint inspectors with right of entry into the houses to see that the regulations are observed. The maximum penalty for breach of these laws will be $25, and $10 for each day the offense is continued.

The Seventeenth International Congress of Medicine

Arrangements are being made for the seventeenth International Congress of Medicine which will be held in London on August 6-12, 1913. The University of London, the Imperial College of Science and Technology and the City and Guilds College have expressed their willingness to put rooms at the disposal of the congress. It has been decided that the sections of laryngology and otology will be allotted two adjoining rooms and that the councils of these two sections shall arrange their programs in a conjoint meeting, and that their transactions shall be published in one volume and supplied to each member of the section. A section of radiology will be included in the congress. The section of pathology will include a subsection of chemical pathology. A section of anesthesia, both general and local, will be established. Sections XX and XXI of the last congress will be so altered that one section will be devoted to naval and military medicine and another section wholly devoted to tropical medicine. The following alterations have been made in the titles of the sections: Section III, from general and experimental pathology to general pathology and pathological anatomy; Section IV, from bacteriology and pathologic anatomy to bacteriology and immunity; Section XVIII, from hygiene and immunity to hygiene and preventive medicine. Papers introducing subjects for discussion will be previously printed and distributed to all the members of the section who have intimated their intention to take part in the discussion and to any members who may apply for them. The introductory papers cannot be printed in all the four official languages, but abstracts of them will be printed, as was done at the last London congress. In each section, the morning sessions will be devoted to discussions on subjects of interest to be selected by the officers of the sections. Each discussion will be introduced by not more than two speakers, to be selected by the officers of the section, with due regard to the international character of the meeting. It shall not be permissible to read the introductory papers already printed, but a time not exceeding twenty minutes shall be allowed to each introducer to read and elaborate an epitome of his introductory paper. Subsequent speeches in the discussion shall not exceed ten minutes. None but the introductory speakers shall be invited by the officers of the section to take part in the discussion. At the morning session no papers other than on the subjects set down for discussion shall be taken up, unless the general discussion has terminated before the hour fixed for the termination of

the morning section. The afternoon session shall be devoted to papers offered by the members of the section. The staff of the section shall have the power of selection from among the papers offered. Not more than fifteen minutes shall be allowed for the reading of any such paper nor more than five minutes for any speech discussing it.

The Cambridge Hospital for Special Diseases

At Cambridge a very small but remarkable hospital was founded five years ago for the study of special diseases by some of the leaders of the profession—Sir Clifford Allbutt, Professor Osler, Sir William Church, Sir Jonathan Hutchinson, Sir Richard Douglas Powell, Sir Henry Morris, Sir W. Watson Cheyne, Sir Victor Horsley and Sir Donald MacAlister. The objects for which the hospital were established were thus stated by the committee: "Much and fruitful research has been done in acute diseases, but there are many chronic and widespread maladies which have not yet received the attention they deserve. These, though not commonly immediately fatal to life, incapacitate the sufferer from active work, cause great pain and misery, and finally leave the victim helpless and entirely dependent on the kindness and charity of his friends or of strangers. Patients suffering from these diseases, owing to the slow progress and long continuance of their illness, are not suitable for reception into general hospitals, which as a rule admit by preference cases of the more acute diseases. The mode of origin or progress of these affections is very imperfectly known, and little therefore can be done in the way of their rational treatment. The great need of scientific research on these chronic diseases has been strongly felt by the medical profession for many years." At present, the hospital is lodged in a small private house containing four beds, and for the most part is supported by subscriptions from physicians. A bulletin giving the results of the work of the staff is issued from time to time. Rheumatoid arthritis is one of the subjects which has been investigated. Though no great advance in knowledge can be chronicled yet much careful work has been done which clears away prevalent misconceptions and may make a path for future advances. The house which is used as a hospital is small and in many ways inconvenient. It has therefore been decided to build a small hospital for which a site of one acre on the outskirts of Cambridge has been secured. The plans have been drawn up. There will be a consulting room, library, three rooms for research, a photographic dark room and a room for *x*-ray apparatus. The cost is estimated at $8,000.

The Teaching of Hygiene in Elementary Schools

Dr. Addison, lecturer on anatomy at St. Bartholomew's Hospital and liberal member of parliament for Hoxton, has introduced a valuable bill: "to require that in public elementary schools instruction shall be given in hygiene, and to girls in the care and feeding of infants." This bill is in no sense a party measure and has received the support of more than 200 members of the house on all sides. Its first reading has been carried unanimously. Since the bill was first introduced last year the principal health officer of the local government board has stated in one of his reports that the provision of this instruction would greatly prevent the waste which has caused so much pauperism in Great Britain. Of late years there has been considerable quickening of the public conscience in this matter, and owing to the efforts of various associations and the voluntary work of teachers and public authorities there has been a remarkable diminution in infant mortality. Nevertheless, one child in every three dies under the age of 5 years, and one out of every five under the age of 12 months. The number of children who die under the age of 5 years amounts to 150,000. The causes are manifold: bad sanitation, crowded rooms, poverty, etc. But Dr. Addison does not hesitate to say that at least 50,000 die as a direct or indirect consequence of parental ignorance. This is particularly true for the manufacturing districts of the north. In the fifteen large Lancashire towns with a population of 3,000,000 the death-rate for the summer quarter of last year was 30 per cent. higher than in London, and this was mainly due to infant mortality. In the town of Burnley, which has an unenviable reputation, the health officer attributes one-fifth of the deaths to the fact that the mothers work in factories and leave their children in charge of ignorant persons.

Plague in India

The recrudescence of plague in India was announced in a previous letter to THE JOURNAL. In reply to a question in parliament, Mr. Montague, the under secretary for India, stated that the situation was very seriously regarded by the authorities who had been hopeful of a permanent diminution, and had made every effort to stamp out the disease. In the central provinces of Agra and Oudh alone the deaths from plague amounted to 43,508 in February and 95,884 in March.

The Lowest Birth-Rate and Death-Rate on Record in Scotland

A short time ago the lowest birth and death-rates on record in England were reported in THE JOURNAL. A similar announcement has just been made with regard to Scotland. The birth-rate for 1910 was 25.16 per thousand and the death-rate 14.66, the lowest figures ever recorded.

PARIS LETTER

(From Our Regular Correspondent)

PARIS, April 28, 1911.

Illegal Practice of Medicine in the Pharmacies

The Syndicat médical de Paris has just made an attempt to come to an understanding with the Syndicat des pharmaciens de Paris et de la Seine on the question of the illegal practice of medicine in the pharmacies. Unfortunately, after two entire sessions devoted to the joint examination of the important questions interesting the two professions, it appeared evident that the point of view of the physicians and that of the pharmacists were irreconcilable. The delegates from the Syndicat des pharmaciens asserted that the illegal practice of medicine was forced on them by the public and that their business existence depended on it. If one druggist were to refuse to sell non-toxic drugs, the customer would merely go to another pharmacist. The delegates of the Syndicat médical de Paris replied that the simplest drugs might in certain cases be harmful, or at least, useless, and might, if only by causing the patient to lose precious time, become dangerous. The delegates of the Syndicat des pharmaciens then proposed that pharmacists should be granted the right to sell once to a customer commonly used drugs, without a prescription, at the same time urging the patient to find a physician before coming again. This proposition was evidently too contrary to the law of the practice of medicine and pharmacy to be accepted. A medical society, charged with the duty of defending the interests of the medical profession, could not take the responsibility of approving a tolerated violation of law.

The delegates of the medical society proposed that a notice like the following should be posted in all of the pharmacies which wished to accept it, and especially in those of the members of the pharmacists' society: "In accordance with the laws which regulate the practice of medicine and pharmacy, in order to safeguard strictly the responsibility of pharmacists and in the interests of its health, the public is invited, in case of any indisposition, to call in a physician, since any delay in medical intervention may entail irreparable consequences, which might be avoided by the judicious attentions which can be given only by a physician." The pharmacist delegates, however, considered the proposition impracticable. They merely proposed to aid physicians to prosecute for such overt instances of illegal practice of medicine as consultations in the rear of the shops, and systematic dressings, etc., given to patients. They were also willing to take part in a newspaper campaign of publicity with regard to the danger of asking a druggist for drugs without a physician's prescription.

Similar divergencies came to view on the subject of the renewal of prescriptions. According to the law, druggists have no right to deliver drugs on old prescriptions, whether they call for toxic substances or not. The law on this point is violated daily, and the delegates of the Syndicat des pharmaciens declare that this violation is forced on them by the habits of the public. To regularize their irregular situation, they proposed the following principle: "Every prescription which does not bear the words 'not to be renewed' may be filled again." The delegates of the medical association, on the other hand, proposed the following rule, which is in accordance with the spirit of the law and guarantees the safety of the people: "No prescription may be renewed by a druggist, except those on which the physician shall have written the words 'to be renewed.'"

Other divergencies also appeared on the question of the delivery of drugs without prescriptions. The pharmacists expressed a wish that a list of drugs not to be delivered without prescriptions should be drawn up, while the physicians wished that a list should be made of the only drugs which the pharmacist would have the right to sell without prescriptions. Agreement was not reached on any of these points.

Personal

In its session of April 25, the Académie de médecine elected as national correspondents, Dr. Blanquinque of Laon and Dr.

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Laguesse, professor of histology at the Faculté de médecine de Lille.

Improvements in the Hospitals

The municipal counsel of Paris has just authorized the expenditure of $2,000,000 (10,000,000 francs) for improvements in the following hospitals: the Hôpital Cochin, the Hôtel-Dieu, the Bicêtre, the Hôpital des Enfants-Malades, the marine sanatorium of Hendaye, situated on the Bay of Biscay, and the Nouvelle-Pitié.

BERLIN LETTER

(From Our Regular Correspondent)

BERLIN, April 20, 1911.

Personal

In place of Professor Matthes, Professor Moritz of Strasburg has been nominated for first place for the internal medical clinic at Cologne, and it is rumored that Moritz has accepted the call. The singular circumstances that a man should go from a university to an academy and thus sacrifice his position is explained by the fact that Moritz soon after his appointment at Strasburg alienated from himself the physicians of that place and did not possess the faculty of securing himself in his present position. It is to be hoped that this experience will stand him in good stead in his new place.

Inoculation of Syphilis in Rabbits

Professor Uhlenhuth, director of the imperial health office in Berlin and soon to be professor of hygiene in Strasburg, reported, at a recent meeting of the *Berliner medizinische Gesellschaft*, the inoculation of rabbits with syphilis. The injections were made into the testicles and into the blood vessels. By further inoculations into other animals, sixteen transmissions were secured and in this manner the virulence was raised so that the inoculations yielded 100 per cent. of successes. Clinically three forms could be distinguished: Erosions of the scrotal skin, chronic inflammation of the testicle and periorchitis. Histologically the lesions resembled those of human syphilis and contained many spirochetes. Moreover, Uhlenhuth and his coworkers were able, by the injection of very virulent rabbit material into the circulation of other rabbits, to induce general syphilis in these animals. In the circulating blood of these animals living spirochetes could be demonstrated. General syphilis could be produced also in monkeys through the circulation. In the discussion that followed this paper the skepticism which Professor v. Hansemann expressed regarding the etiologic significance of *Spirochæta pallida* for syphilis was remarkable. He admits that the spirochete plays a certain rôle in syphilis, but he doubts that it causes the disease since it is not found in the tertiary forms. In the products of the inoculation there could be found many deviations from the manifestations typical of human syphilis. The other speakers opposed this skepticism with the exception of Dr. Siegel, who used to champion other ameba-like germs as the cause of syphilis. Uhlenhuth asserted in closing that the same symptoms were found in the infected monkeys as in man. That no spirochetes are found in gummas is not singular as even in tubercles it is sometimes impossible to demonstrate tubercle bacilli. He added that malaria parasites have not yet been grown in pure culture, and yet no one doubts their etiologic significance.

Age and Tuberculosis

The Prussian national statistical office has recently published a review of the mortality from tuberculosis in Prussia according to sex and age for 1908 and 1909. In an article in the *Zeitschrift für Tuberkulose* B. Frankel reproduced these tables and remarks that they demonstrate the progressive diminution in the death-rate from tuberculosis. In 1908 there died in Prussia, 63,320; in 1909, 60,871. For 100,000 living there were in 1908 16.40, in 1909, 15.59 deaths from tuberculosis. The mortality from tuberculosis in the first year of life shows in 1908 the high percentage of 26.86 per 100,000 living, the highest in any of the age classes, but in 1909 it was only 23.65. The death rate from tuberculosis of children from 1 to 15 years old has never since 1881 reached so low a figure as in 1909. While in 1881 the deaths numbered 11,000, and in 1902 they were more than 13,000, in 1909 they amounted only to 10,621.

Ward for Pay-Patients at the Moabit City Hospital

At the last session of the city council this new departure which I have previously mentioned was inaugurated. A physician belonging to the Sozialdemokratische party opposed this move as essentially an introduction of class distinctions into the municipal hospitals. He declared that every preference of the better as against the poorer classes was an evil. He was of the opinion that such an arrangement would work prejudicially to the general care of the sick. He wanted no class distinctions in the municipal hospitals and opposed it also on account of the financial interests of the city. In reply to this the mayor emphasized the pressing need of meeting the requirements of the middle classes in the way proposed. Care should be taken to bring the arrangements already present into an orderly legitimate system. He was convinced that by the establishment of a second class, the level of the third class would be raised. So long as class distinctions existed they must be recognized. As a matter of fact there are many people who for certain reasons cannot apply to the municipal free hospitals, who yet are unable to pay the high prices charged by private sanatoria, or for medical treatment at home, without actually impoverishing themselves. If the city should devote a small portion of the public funds to the assistance of these people, a good work would be accomplished. There is no occasion for any uneasiness on the part of the medical profession in view of this undertaking.

Disinfection of Books

Under the heading, "The Spread of Infectious Diseases by Printed Matter," Dr. Trautmann, who is at the head of the state hygienic institute in Hamburg, presents a very interesting article in the *Zeitschrift der Schulärzte*. The possibility of conveying infection by printed matter must be admitted although positive evidence of its occurrence can seldom be furnished. It is evident that circulating libraries constitute an especial danger in this respect. The conveyance of tuberculosis is especially to be feared, because this disease is wide-spread, usually runs a chronic course, giving opportunity for literary recreation for a long time, and further the bacillus is readily deposited on objects by coughing and the disease germs have an extraordinary capacity of resistance. Naturally other diseases can be conveyed in the same way. The use of books at school is not without danger. There is possibility enough for transmission of disease by means of text-books and books from the school library. England, America and Austria have possessed for a long time the beginnings of an official regulation for the disinfection of books. Until a few years ago, however, Germany has had no effective and harmless method for this purpose.

Books are difficult objects to treat; neither dry heat nor streaming steam at 100 C., neither sulphur dioxid nor cold formaldehyd gas gives satisfactory results. At present a solution of the question appears to have been reached and by two entirely different processes. The method of Findel and Xylander consists in the application of hot air at a temperature of 75-80 C. (167-176 F.) with a relative humidity of 30-40 per cent. or even up to 80 per cent. The moist heat acts essentially by conduction and radiation. Unfortunately sterilization by this process requires a considerable length of time. The process for a single disinfection of closed books, and the process is intended for these, requires two days. Moreover only the vegetating forms of bacteria are killed, the resting forms not being affected.

In Glaser's quicker acting modification of this method, air at 98-100 C. and a humidity of 60 to 80 per cent. is employed with the addition of formaldehyd, but there are objections to this method, which seems to be injurious to the books. Trautmann proposes another process which he considers more reliable. He bases it on the investigations of Esmarch and Kister. He calls attention to the process introduced three years ago with the so-called "Hamburg apparatus" which depends on the operation of a stream of steam evaporated under reduced pressure and saturated with formaldehyd at a low temperature. This process has worked well in the disinfection of furs, skins, leather, silk and velvet goods, and is also well suited to the disinfection of books, butterflies, stuffed animals, etc. The most important point is that the Hamburg process operates with streaming saturated steam but at a low temperature, and does its work in a short time, more effectually and at a lower cost. A complete disinfection does not take longer than ninety minutes at the most.

A condition for the successful action of the Hamburg apparatus is the careful spreading of the leaves of the book. It is not suited to the disinfection of closed, thick books or closely packed printed matter. Trautmann uses for the necessary spreading a stout rack in the form of a trough; another method consists in drawing back the covers of the books, tying

them together over the back of the book and hanging a row of books thus treated on the rods in the Hamburg apparatus. Xylander unites the two methods in one. The proposed method of disinfection kills all disease germs and does not injure the books in any way. Trautmann's claims have been confirmed by a thorough trial by Xylander and Glaser. Gärtner selects alcoholic steam for disinfection, but this method is not to be recommended because the disinfection takes a long time and injures the books.

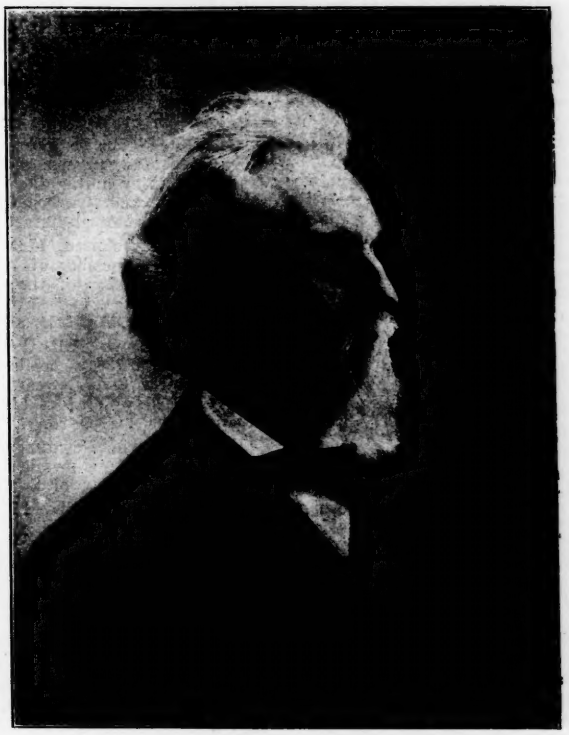
VIENNA LETTER

(From Our Regular Correspondent)

VIENNA, April 25, 1911.

The Repeated Use of Prescriptions

In this country the doctor's prescription is handed back to the patient by the apothecary who has made it up, only the date of the prescription being added by him. Very often the latter rule is not strictly adhered to; thus the patient is enabled to obtain the remedy for an indefinite number of times. By such means, crimes and suicides have been committed repeatedly here within a short time, lately. Therefore, a memorandum has been presented to the ministry of the interior by medical associations, and the necessity of strict adherence to the existing rules emphasized. Shortly afterward, all druggists and pharmacists, as well as doctors, were admonished by an ordinance of the ministry, to turn their attention to the abuse of medical prescriptions by patients. The law requires that every filling of a prescription be marked on it by the dated stamp of the dispenser. If "heroic" remedies or strong poisons and other narcotic substances are contained in the prescription, the doctor should add how often the patient may have it made up by writing down: *Ne repetatur*, or *Repetatur semel*. Attention is chiefly drawn to the hypnotic and narcotic substances of modern chemistry, which are not yet contained in the "poison list," but which are most often the object of repeated administrations by the patients. On this point the interests of the public are coincident with those of the profession, although naturally the impossibility of obtaining a remedy without consulting a physician will be found an unpleasant difficulty by many easy-going patients.



I. N. DANFORTH, 1836-1911

Marriages

FRANCIS WINSLOW JOHNSON, M.D., Glyndon, Md., to Miss Marion Lawrence Reese, at Baltimore, April 24.

DAVIS THOMAS BOWDEN, M.D., Paterson, N. J., to Miss Helen W. Bryce of Passaic, N. J., April 19.

RAYMOND H. GAYNOR LAUB, M.D., Brooklyn, N. Y., to Miss Lucretia Ferris of Elmira, N. Y., April 24.

JOHN RICHARD CALLAWAY, M.D., to Miss Luella Louise Wingfield, both of Kansas City, Mo., April 29.

ANDREW JOHNSON BROWN, M.D., The Dalles, Ore., to Miss Marie Wetzel of Portland, Ore., April 20.

JAMES SOUTHALL WILSON, M.D., to Miss Julia Gardiner Taylor, at Williamsburg, Va., April 17.

ARTHUR H. MEYERS, M.D., Mystic, Conn., to Miss Helen M. Barker of East Orange, N. J., April 21.

PETER H. JOBSE, M.D., to Miss Minnie Fitzgibbon, both of Milwaukee, April 26.

Deaths

Isaac Newton Danforth, M.D., one of the best beloved of the older physicians of Chicago; died at his home, May 5, from heart disease, aged 75.

Dr. Danforth was a descendent in direct line of Nicholas Danforth who landed in Massachusetts Bay in 1634. His paternal grandfather and three uncles were physicians before him and this naturally turned young Danforth's mind toward medicine. He graduated from Dartmouth Medical School, Hanover, N. H. in 1862, and was given the honorary degree of A.M. by Dartmouth College nineteen years later. After four years of practice in New Hampshire, Dr. Danforth located in Chicago where he soon attained high rank as a practitioner and teacher.

His work as a medical teacher commenced in 1868, when he became instructor in chemistry at Rush Medical College. Three years later he was made lecturer of pathology; in 1873 president of the spring faculty and in 1881 professor of pathology. His work in Northwestern University Medical School began in 1882, when he was made professor of pathology. From 1887 to 1895 he was professor of clinical medicine in that institution. In 1876 he became professor of pathology in the Woman's Hospital Medical College, which afterward became Northwestern University Woman's Medical School, and continued in this position for nineteen years; and for four years thereafter was dean of the faculty and professor of internal medicine.

He became attending physician to St. Luke's Hospital in 1870 and continued in that position until 1895. For the first ten years of the existence of Wesley Hospital, he was chief of its medical staff; for many years he was pathologist to Cook County Hospital, and consulting physician to various hospitals in Chicago for thirty years past.

His society membership included the American Medical Association, the Association of American Physicians, the Chicago Pathological Society, of which he was once president, and he was one of the founders and first president of the Society of Medical History of Chicago.

Dr. Danforth was a frequent contributor to the medical literature, and more especially of late years, on the lines of medical history and biography; in 1907 his life of Dr. Nathan Smith Davis was published. Dr. Danforth's chief recreation was in the line of history and his collection of Americana was of more than local repute.

In 1909 Dr. Danforth founded a medical missionary hospital in Kiu Kane, China, in honor of his first wife, Elizabeth Skelton Danforth.

He had not been in robust health for a long time, but was confined to his house for only about three weeks. He had been a sufferer with asthma for a long while, but his death was due to valvular disease of the heart.

As a general practitioner, Dr. Danforth was exceptionally successful. He was one of the first in Chicago and the Northwest to use the microscope in pathology. He was a man of steadfast conviction, of most exemplary life and stood always for the best in all things. His death will be deplored by his many friends and by the hundreds of men and women in the profession all over the world whom he has helped, both materially and by wise counsel.

Herbert Milton Nash, M.D. University of Virginia, Charlottesville, 1852; the oldest and most esteemed physician of eastern Virginia; died April 26, at the Sarah Leigh Hospital, Norfolk, Va., from shock following an operation for the removal of gallstones, aged 79. After his graduation, Dr. Nash took post-graduate work for a year in New York City, and then began practice in Norfolk, and was the only survivor of the physicians who combated yellow fever in that city in the great epidemic of 1855. On the outbreak of the Civil War he was appointed assistant surgeon of the State Force of Virginia and later was made surgeon and corps surgeon in the Confederate service, where he served throughout the Civil War. He was a charter member of the Norfolk Medical Society and served for several terms as its president; a member of the Virginia State Medical Society and, at one time, its president; and at the time of his death an honorary fellow. He was also a member of the American Medical Association, American Public Health Association and the Southern Surgical and Gynecological Association. He was at one time vice-president of the Medical Examining Board of Virginia, president of the Norfolk Board of Health, president of the Board of Quarantine Commissioners of the district of Elizabeth River, and formerly quarantine officer. He was also a member of the staff of St. Vincent's and the Norfolk Protestant hospitals. In 1902, on the occasion of the fiftieth anniversary of the graduation of Dr. Nash from the University of Virginia, he was the guest of honor of the faculty of that institution. The Norfolk County Medical Society, at a special meeting, adopted resolutions expressing the personal and professional loss felt by its members in the death of its oldest and most esteemed ex-president and member.

Carlton C. Frederick, M.D. University of Buffalo, N. Y., 1881; a member of the American Medical Association, the American Gynecological Society, the American Association of Obstetricians and Gynecologists, president of the Buffalo Academy of Medicine and many local societies; adjunct professor of obstetrics in the medical department of Niagara University from 1883 to 1896, and clinical professor of gynecology in the University of Buffalo since 1897; one of the founders and surgeon in chief to the Buffalo Woman's Hospital, and a member of the staff for many years of the Buffalo General and St. Mary's Lying-In Hospitals; author of many monographs on gynecology and abdominal surgery; died at his home, April 30, from endocarditis, aged 55. At a special meeting of the Buffalo Academy of Medicine, action was taken on the death of Dr. Frederick and eulogies were pronounced by many of his colleagues.

Norman J. Pettijohn, M.D. Kansas City (Mo.) Medical College, 1884; formerly a member of the American Medical Association; a Federal soldier and later assistant surgeon of volunteers in the Civil War; formerly chief surgeon of the Kansas City, Fort Scott and Memphis Railroad, and later assistant chief surgeon of the Frisco system; for several years chief surgeon of the Metropolitan Street Railway Company of Kansas City; once president of the International Association of Railway Surgeons and of the Jackson County Medical Society; died at his home in Kansas City, April 22, aged 71.

Erasmus Van Meter Swing, M.D. University of Pennsylvania, Philadelphia, 1867; a member of the American Medical Association; president of the Coatesville, Pa., Board of Health and chief of staff of the Coatesville Hospital; who came to Philadelphia to attend the reception given President Taft by the Philadelphia Medical Club, May 5; died in the Bellevue-Stratford Hospital in that city, May 6, from acute gastritis, aged 70.

Jacob Dimmitt Norris, M.D. University of Maryland, Baltimore, 1878; a member of the Baltimore Clinical Society; president of the board of police examiners of Baltimore; formerly a member of the city council and vaccine physician; president of the local pension board and formerly mayor and surgeon of the Fourth Infantry, N. G., Maryland; died at his home in Baltimore, April 24, from heart disease, aged 67.

Harry Johnson Dean, M.D. Jefferson Medical College, 1890; a member of the American Medical Association and American Academy of Ophthalmology and Oto-Laryngology; eye, ear, nose and throat surgeon to the Hershey Memorial Hospital, Muscatine, Ia.; died at his home in that city, April 26, from nephritis, aged 42.

Edward W. Fox, M.D. Denver and Gross College of Medicine, Denver, Colo., 1904; a member of the Colorado State Medical Society and president of the Las Animas County Medical Society; a specialist in diseases of the eye and ear; died at his home in Trinidad, Colo., April 30, from disease of the lungs, aged 32.

James B. Morgan, M.D. Medical College of Georgia, Augusta, 1876; professor of anatomy and clinical surgery in his alma mater; sometime president of the Medical Association of Georgia and the Alumni Association of the University of Georgia; for several years president of the Augusta Board of Health and coroner's physician for Richmond County; a member of the State Board of Health; died at his home, April 23, aged 53.

Robert Caldwell, M.D. University of California, San Francisco, 1869; a member of the Medical Society of the State of California and a pioneer practitioner of San Jose; for several years a practitioner of Nagasaki, Japan; a member of the Western Union Telegraph Company's famous expedition through Alaska in 1867 and 1868; died at his home in San Jose, April 20.

Thomas Hamill, M.D. Eclectic Medical Institute, Cincinnati, 1855; Humboldt Medical College, St. Louis, 1867; Missouri Medical College, St. Louis, 1868; acting assistant surgeon in the army during the Civil War; for twenty years a member of the board of pension examiners of Johnson County, Kan.; died at his home in Olathe, March 18, aged 85.

Henry Allison Lathrop, M.D. Hahnemann Medical College, Chicago, 1881; New York University, New York City, 1890; a member of the American Medical Association; a member of the Wisconsin state legislature in 1887; died at his home in Marshfield, Wis., April 25, from cerebral hemorrhage, aged 61.

Thomas Hodge Johnson, M.D. Eclectic Medical Institute, Cincinnati, 1879; a veteran of the Civil War; for several terms superintendent of schools of Laclede County (Mo.); a member of the Missouri legislature for three terms; died at his home in Springfield, April 24, aged 70.

Cornelius Sampson Jackson, M.D. Harvard Medical School, 1865; assistant surgeon of the Thirtieth Massachusetts Volunteer Infantry during the Civil War; a member of the Boston Surgical and Gynecological Society; died at his home in Hudson, Mass., April 22, aged 67.

Richard E. Johnson, M.D. Miami Medical College, Cincinnati, 1856; a member of the American Medical Association and a life member of the Ohio State Medical Association; president of the First National Bank of Lima; died at his home in Gomer, April 24, aged 76.

Lewis S. Brown, M.D. College of Physicians and Surgeons, Keokuk, Ia., 1873; a member of the Missouri State Association, and for several years president of the Knox County Medical Society; died at his home in Edina, April 21, from arteriosclerosis, aged 75.

Vesley Marvin Newcombe, M.D. University of Vermont, Burlington, 1884; a member of the New Hampshire Medical Society; a physician of Somersworth, and a numismatist of note; died at his home, April 25, from cirrhosis of the liver, aged 50.

Cameron Piggot, M.D. University of Maryland, Baltimore, 1882; dean of the academic department and professor of chemistry and geology in the University of the South, Sewanee, Tenn.; died at his home in that place, April 30, aged 55.

George Bruce Thomas, M.D. University of Alabama, Mobile, 1898; of Maysville, Ky.; died in the Hord Sanitarium, Shelbyville, Ind., April 8, from the effects of corrosive poison believed to have been self-administered with suicidal intent, aged 45.

Alfred H. Caviness, M.D. Baltimore University School of Medicine, 1901; a member of the Medical Society of the State of North Carolina; died at his home in High Falls, April 29, from septicemia, the result of a carbuncle of the neck, aged 53.

Lewis H. Kirk, M.D. University of Pennsylvania, Philadelphia, 1877; a member of the American Medical Association and local United States pension examining surgeon; died at his home in Oxford, Pa., April 26, from heart disease, aged 60.

John Worthing Hurlbert, M.D. Cleveland University of Medicine and Surgery, 1877; formerly a member of the American Medical Association; died at his home in Uniopolis, Ohio, April 24, from carcinoma of the stomach, aged 58.

Thomas Jefferson Largen, M.D. Texas Medical College, Galveston, 1874; of San Antonio; formerly a member of the State Medical Association; a Confederate veteran; died at the home of his son in San Antonio, April 23, aged 70.

John Clayton Abernathy, M.D. University of Nashville (Tenn.), 1866; a prominent practitioner of East Tennessee and a Confederate veteran; died at the home of his son in Chattanooga, April 20, from senile debility, aged 87.

Robert I. Bowie, M.D. Royal University of Munich, Bavaria, 1880; formerly a practitioner of San Francisco, but for many years a resident of Nagasaki, Japan, where he founded a hospital; died in the latter city, April 24, aged 52.

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George M. Covert, M.D. University of Louisville, Ky., 1873; local surgeon for the Missouri Pacific Railway at Arkansas City, Kans., and one of the directors of the Arkansas City Hospital; died at his home, April 22, aged 70.

Horace T. Cooper, M.D. Hahnemann Medical College, Chicago, 1867; a pioneer resident of Colorado Springs and a veteran of the Civil War; died at the home of his son in Denver, April 23, from senile debility, aged 82.

Archibald Alexander Terhune, M.D. Jefferson Medical College, 1888; a member of the State Medical Association of Texas; died at his home in Jefferson, April 22, from accidental poisoning by phenol, aged 50.

Fannie L. Draper, M.D. Chicago Homeopathic Medical College, 1902; formerly a missionary of the Methodist Episcopal Church in China; died recently and was buried in Jackson, Mich., April 23, aged 78.

Roland Augustus Davis, M.D. Boston University School of Medicine, 1893; a member of the homeopathic staff of the Somerville (Mass.) Hospital; died recently at his home in that city, aged 64.

Frederick Gelwicks Strock, M.D. Jefferson Medical College, 1886; of St. Thomas, Pa.; a member of the Franklin County Medical Society; died in Johns Hopkins Hospital, Baltimore, April 25, aged 48.

Henry Slosson, M.D. Cleveland University of Medicine and Surgery, 1861; for many years a practitioner of Youngstown, O.; died at his home in that city, April 23, from cirrhosis of the liver, aged 75.

Joseph Warren Cadwell, M.D. Jefferson Medical College, 1863; Bellevue Hospital Medical College, 1866; of Chandler City, Mo.; was suffocated by smoke in his room in that city, May 2, aged 72.

Carl Lebrecht Rudolph Zimmermann, M.D. University of Breslau, Germany, 1857; a practitioner of Campbellsport, Wis., since 1858; died at his home, March 28, from heart disease, aged 81.

Joseph Brockway (license, Iowa) a practitioner of Iowa and Oklahoma since 1864; who retired in 1901; died at his home, Aline, Okla., April 26, from senile debility, aged 84.

Lyman Monson Nichols, M.D. Geneva (N. Y.) Medical College, 1858; for thirty-five years a practitioner of Pulteney, N. Y.; died at his home in that village, April 24, aged 75.

John Wright, M.D. University of Louisville, Ky., 1857; surgeon in the Confederate service throughout the Civil War; died at his home in Sardis, Miss., April 26, aged 76.

R. Russell Martin (registration Seventeenth Judicial District, Texas, 1901); of Burleson; died in a hospital in Fort Worth, April 11, from septicemia, aged 33.

Jesse Mitchell Seabrook, M.D. Howard University, Washington, D. C., 1908; of Washington; died in Asheville, N. C., Nov. 12, 1910, from tuberculosis, aged 30.

Gustav Fuchs, M.D. Missouri Medical College, St. Louis, 1873; surgeon of volunteers during the Civil War; died at his home in St. Louis, April 19, aged 74.

Francis Stephen Winter Cook, M.D. Eclectic Medical Institute, Cincinnati, 1896; died at his home in Toledo, O., March 13, from chronic nephritis, aged 56.

William Wallace Runkel, M.D. Wisconsin College of Physicians and Surgeons, Milwaukee, 1898; died at his home in Milwaukee, April 6, aged 38.

Roderick Kennedy, M.D. Queen's University, Kingston, Ont., 1863; of Bath, Ont.; died in the General Hospital, Kingston, Ont., recently, aged 88.

Hans Treskow, M.D. New York University, New York City, 1882; of New York City; died in the Lebanon, N. Y., Hospital, April 18, aged 56.

Gilbert H. Tollington, M.D. College of Physicians and Surgeons, Chicago, 1885; died at his home in Clearwater, Minn., February 12, aged 49.

William Reilly, M.D. University Medical College of Kansas City, Mo., 1874; of St. Louis; died in St. Mary's Hospital in that city, April 24.

Clarence Spahr (license, Allegheny County, Pa., 1881); for thirty-five years a practitioner of Ridgeville; died at his home, April 22, aged 67.

Walter Howard Muchmore, M.D. New York University, New York City, 1894; died at his home in Brooklyn, April 19, aged 48.

Davis H. Richardson, M.D. Jefferson Medical College, 1885; died at his home in Calvert, Md., April 25, from pneumonia, aged 60.

Henry B. Speitel (license, Indiana, 1897); died at his home in Radnor, April 14, aged 80.

The Propaganda for Reform

IN THIS DEPARTMENT APPEAR REPORTS OF THE COUNCIL ON PHARMACY AND CHEMISTRY AND OF THE ASSOCIATION LABORATORY, TOGETHER WITH OTHER MATTER TENDING TO AID INTELLIGENT PRESCRIBING AND TO OPPOSE MEDICAL FRAUD ON THE PUBLIC AND ON THE PROFESSION

TUBERCLECIDE

Another Consumption Cure Humbug

Tuberclecide is a consumption cure fake exploited by the Tuberclecide Company with headquarters at Los Angeles, Cal. The reputed discoverer of this remedy is one Charles F. Aycock, formerly of Oklahoma. Tuberclecide is brought to the attention of newspaper readers not only by display advertisements, but by means of advertisements in the form of news items. Its method of exploitation differs little from that of similar fakes—the inevitable "follow-up letters" and other paraphernalia of the mail-order medical quack being used. Some of the claims made for this nostrum are:

"The discovery of the age—Tuberclecide."
"Consumption can be cured by Tuberclecide."
"Tuberclecide is an unfailing Germicide for all Tubercle Bacilli."
"Tuberclecide is a specific that eliminates tubercle bacilli from the human body."
"This treatment will cure tuberculosis in anyone who has enough vitality to survive twelve weeks independent of our treatment."

Tuberclecide, which is a pale yellow, oily liquid, comes in a 2-ounce bottle, for which $15 is asked. The instructions are to take eight drops on a raw egg, followed with a glass of milk. It is to be taken three times a day during or after each meal, the dosage to be increased until fourteen drops has been reached. An original sealed bottle of this nostrum, sent in by Dr. Edward P. Fick of Seattle, was submitted for examination to the Association Laboratory. The Association's chemists reported:

"Examination of the contents of a sealed, original bottle of Tuberclecide shows it to be essentially a solution of creosote or guaiacol in some bland oil, probably olive oil."

This is but another verification of the statement so often made, that practically all nostrums that contain any medicinal ingredients whatever, consist of drugs that have been used for years by the medical profession. The "patent-medicine" manufacturer, for the purpose of deceiving the purchaser, invests such drugs with virtues they do not possess.

In the case of Tuberclecide, we find, as indicated by the chemists' report, that the tuberculous patient, after being instructed as to diet and hygiene, is given as an accessory treatment small doses of creosote or guaiacol, remedies that have been in use for years. It is easily conceivable that a consumptive who should strictly follow the rules regarding the methods of living, which every intelligent person now knows to be the essential treatment in tuberculosis, would in all likelihood be benefited, whether he took minute doses of creosote or not. The viciousness of the Tuberclecide treatment is twofold: First is the fact that individuals taking it will be led to rely on the medicine—which has no curative value—rather than on the dietetic and hygienic treatment which, while really the all-important part of it, is made to appear as incidental and subordinate. Second, it is little less than robbery to charge anyone, well or ill, $15 for a mixture of olive oil and creosote that is not worth 15 cents. In the preposterousness of the claims and in the inordinate price charged for it, Tuberclecide is typical of the many cruel consumption cure frauds with which the country is afflicted.

GLORIA TONIC

This rheumatism "cure" is exploited by John A. Smith, Milwaukee, Wis., and is advertised extensively on both sides of the Atlantic. Some of the claims made for this preparation are:

"The world's greatest rheumatism and gout remedy."
"Gloria Tonic has conquered the demon rheumatism in many cases."
"Has cured many cases of thirty or forty years' standing."
"No remedy is surer—none quite as sure—as Gloria Tonic."

The preparation has been analyzed by the British Medical Association's chemists, who reported:

"Analysis showed the presence of potassium iodid, guaiacum resin, extract of licorice, powdered licorice, starch, mineral matter—apparently a mixture of talc and kaolin—a resinoid substance, and a trace of alkaloid. . . . The quantities of the various ingredients are estimated as accurately as possible, and the following formula was indicated:

"Potassium iodid	1.8 grains
"Guaiacum resin	0.8 grain
"Extract of licorice	1.0 grain
"Resinoid (phytolaccin?)	0.9 grain
"Powdered licorice	1.7 grains
"Rice starch	2.0 grains
"Talc and kaolin	2.1 grains"

The variability of nostrums of this type is well illustrated by the fact that a sample of Gloria Tonic analyzed by Dr. Aufrecht of Berlin showed a different composition from those tablets analyzed by the British chemists. Aufrecht, in an article that appeared in the *Pharmazeutische Zeitung*, June 8, 1910, reported: "The Gloria Tonic Tablets examined consisted essentially of 26.76 per cent. potassium iodid and 2.81 per cent. iron (probably in the form of iron saccharate)."

The price charged for a box of fifty tablets of Gloria Tonic is $1; the estimated cost of the ingredients in these fifty tablets is 16 cents.

Correspondence

The Railroads and Human Safety

To the Editor:—In THE JOURNAL, April 15, 1911, p. 1113, after citing the list of accidents shown by the accident bulletin of the Interstate Commerce Commission for July, August and September, 1910, you refer to "the deliberate, cynical disregard of human safety which foreign observers are prone to consider an American characteristic," and say: "When the people are awakened to the possibilities and the necessities of the whole situation, there will be a change."

I beg to call your attention to the Act of Congress, passed April 14, 1910, prescribing the kind and location of safety appliances on all cars engaged in interstate commerce, which, as testified in hearings before the Interstate Commerce Commission, will involve expense on the railroads of $55,000,000. When the commission held hearings preliminary to determining what regulations should be enforced under this law, the railroads offered no objection to the essential features of plans proposed for fully equipping all cars with uniform safety appliances, notwithstanding the enormous expense involved.

J. W. Watson, chief inspector of safety appliances of the Interstate Commerce Commission, in his report for 1909, says:

"As showing the care with which the safety appliances demanded by the law are being maintained, it may be noted that while the railroads dispensed with the services of a great many employees to meet the economies necessitated by falling off of business in 1907, the force of men employed to maintain safety appliances suffered the least curtailment of any. As a result the condition of equipment continued to improve during the slack period of 1908-09, the year just closed showing the least percentage of defective equipment of any years since the law became operative, notwithstanding that the number of cars examined by our inspectors was 125,000 greater than in any previous year. As indicating the great improvement that has taken place within the past five years, it may be stated that the defects per thousand cars inspected in 1905, numbered 309.56, while for the year 1909 the figure is 74.65.

"It is only proper to say that the attitude of most presidents and general managers of railroads has contributed greatly to the good results accomplished. As a rule such officials are in thorough sympathy with the aims and purpose of the law. They have earnestly striven to meet its requirements and have cheerfully cooperated with the commission to secure its effective enforcement."

In his report for 1910 Mr. Watson states that the average of defects found per 1,000 cars had decreased to 65.33 during the year.

The Interstate Commerce Commission's reports show that while in 1900, 67.6 per cent. of the total railway equipment of the United States was fitted with train brakes, in 1910, 99.1 per cent was so fitted. In 1900, 94.3 per cent. of the total equipment was fitted with automatic couplers, while in 1909, 99.3 per cent was so fitted.

The large railroads of the United States paid out for injuries to persons in their transportation departments for the year ending June 30, 1909, $17,705,333. Even were railroad managers controlled by a "deliberate, cynical disregard of human safety" this large payment, which does not fully represent the cost of railway accidents, appears sufficient to cause them to exercise every precautionary measure of safety.

Statistics of the Interstate Commerce Commission will show that a large percentage of railroad accidents are due to the carelessness of employees. Although much railroad legislation has been enacted during the past several years, and a great deal of it in favor of the railway employees at their initiative, no act has ever been passed making it a crime for a railroad employee to disregard a signal or to disobey a rule.

During the railroad rate hearings held by the Interstate Commerce Commission last autumn, many representatives of railroads cited the need of safety appliances, abolition of grade crossings and more substantial construction in general as leading to future increase of expenditure.

While the number of railroad accidents in the United States is greatly in excess of accidents in European countries, yet the conditions of construction here and abroad are very dissimilar. The railroads of Europe were constructed through thickly settled regions and substantial construction was necessary from the beginning.

In the United States the railroads have been largely pioneer enterprises in advance of traffic. The need to get the track down so that the commerce might be served was paramount. So rapid has been the growth of railroad construction that the single track mileage operated in the United States has grown from 192,556 miles in 1900 to 235,402 miles in 1909. At the same time, the rapid growth of population in this country has tended everywhere to render inadequate systems of railroads constructed in comparatively recent years. Vast sums are now being spent in the elimination of grade crossings and for other improvements to promote safety of operation.

In view of these facts, is it quite fair to refer to "deliberate, cynical disregard of human safety" as the attitude of the railroads? Is not the showing that the railroads have made in the interest of greater safety an indication that railroad men are awake to the necessities of the whole situation?

CHARLES E. KERN, Assistant to Director,
Bureau of Railway Economics, Washington, D. C.

[COMMENT.—We are glad to give space to this letter, since, as our correspondent has misapprehended our intent, others may have done the same.

We did not impute "deliberate, cynical disregard of human safety" to the interstate railroads, as a class. It will be remembered that the instance cited was one of disregard of human safety by an urban street railway, which, in spite of warnings, since amply justified, laid its tracks so close together that any one caught between two moving cars was almost certain to be crushed and killed. No words can be too strong to characterize the conduct of a road operated under conditions such that the presumption is, from the outset, that loss of life must result. Such conditions exist and they endanger the public. We are glad to believe, however, that such conditions have grown very rare among the railroads to which our correspondent refers.

Our correspondent will doubtless admit that even here there is still much room for improvement. We fear that the weak point in the defense of these railroads is indicated in the statement that "a large percentage of railroad accidents are

due to the carelessness of employees." Before the carelessness of employees can be urged as an excuse, it must first be shown (1) that the discipline is such that the railroad has every right to expect obedience and carefulness in general; (2) that the proved character of the employee in any responsible post is such that the road has every right to expect faithfulness from him; and (3) that the conditions of operating are such as, on the one hand, to leave as little room as possible for disaster resulting from carelessness, and, on the other, to place no undue strain on the employee's strength and capacity.

It is gratifying to see that the reputation of these roads, with respect to their care of human life, is highly valued. This augurs well for the improvement of whatever conditions may still remain to be improved.—EDITOR.]

Who Should Apply the Wassermann Test?

To the Editor:—This week I was approached by one who styles himself a chemist asking me to instruct him in the Wassermann reaction. The following copy of the reply which I mailed to him is self-explanatory:

"*My Dear Sir:* Your inquiry yesterday, in regard to my willingness in teaching you the details of the Wassermann reaction, has received the most earnest consideration by me. Heretofore I have refused no one who wished to know this work. All such applicants, however, have been physicians.

Personally I should like to teach each one who is interested. The prevalent opinion in Germany to-day is that only trained serologists should do this work. In a recent number of the *Münchener med. Wochenschrift*, K. Taege asserts that only his ability as a physician has enabled him to interpret difficult reactions, made by himself, satisfactorily in given cases.

To avoid being personal and prejudiced in this matter, however, I determined to place your letter in the hands of Dr. Paul G. Woolley, director of the laboratory of the Cincinnati Hospital, and to be guided by his decision. Dr. Woolley is of the opinion that I could not give you a certificate, after a period of instruction in this work, stating that you are fully competent to make a correct reading in every case which may come to you for analysis, because of your lack of medical training.

Since you asked me at the end of a period of instruction to give you a certificate stating that at such time you would be fully competent to do this work, and inasmuch as, according to the opinion of Dr. P. G. Woolley, a recognized authority in pathology, I would be unable to do so, I must refuse the offer you so kindly made me."

I am a staunch supporter of the medical profession, and I believe that none but a physician is capable of passing judgment on the question as to whether a given patient is luetic or not. Experience has shown us how difficult this reaction may become in many instances. The physicians of this state are busily engaged in trying to have the optometry bill vetoed, and I think that we all should be equally active in trying to prevent laymen from practicing medicine in any other of its branches. Furthermore no physician ought to give a certificate to any one certifying to his competency to practice any branch of medicine, and least of all in a case of this kind in which a man absolutely without a knowledge of general medicine and its ethics might affiliate himself with the advertising "venereal quack," and become a harpy to prey on the people.

This man now intends to go East with the hope of finding some physician willing to instruct him, and then to return here with a certificate announcing his fitness.

OSCAR BERGHAUSEN, B.A., M.D., Cincinnati.

An Observation Bearing on the Causation of Sex

To the Editor:—I noticed in THE JOURNAL (April 22, 1911, p. 1228) an abstract of a paper by W. W. Kain, "Can the Sex of the Family be Controlled at Will by the Parents?" Kain is said to agree with E. R. Dawson that the supplying ovary is in reality the essential factor in the causation of sex, the right ovary producing the male and the left ovary the female. I believe that a study of the chromosomes with their adjunct sex chromosomes, etc., will dispel any such notions. But that is too big a subject for this letter. I wish at this time only to report a case that came under my observation last October. A girl married at the age of 14; at the age of 15 she gave birth to a boy, and at 17 to a girl, following which she had three miscarriages produced by herself with a catheter. About two weeks following her last miscarriage she died of lobular pneumonia, at the age of 19. Necropsy revealed a tuberculous cavity in the right apex the size of an English walnut, a serofibrinous pleurisy of the right side, a pericarditis with effusion, no inflammation of the pleura of the left side but the pneumonic condition as bad on the left side. The pelvic area showed no evidences of the miscarriages. There was, however, a congenital absence of the left tube and ovary, of which there was not even a remnant, the broad and round ligaments being apparently normal. The right ovary and tube were perfectly normal. Dr. A. E. McDowell assisted me.

W. O. WISNER, Spokane, Wash.

Queries and Minor Notes

ANONYMOUS COMMUNICATIONS will not be noticed. Every letter must contain the writer's name and address, but these will be omitted, on request.

VENTILATION IN THE PUBLIC SCHOOLS

To the Editor:—I wish to get some information about ventilation of public schools. The system in use in our school, and in a large number of schools in New Jersey, is based on the idea that carbon dioxid is heavier than air, which is correct at a certain temperature. The inlet for pure air is placed near the ceiling, in the expectation that the vitiated air will be forced downward to the outlet near the floor. To my mind this reverses the laws of Nature. Gases will expand when heated, volume increased, specific gravity lessened. Just imagine a class of little children seated in a kindergarten on little chairs having the impure air forced down on them in order to get it out through the outlet! When the room is heated to about 70 F. (the transoms and windows and doors closed with this system), does the carbon dioxid rise to the ceiling? If so, why not let it out there? Being a medical inspector, I would like some light on the subject. JOSEPH PAYNE, Midland Park, N. J.

ANSWER.—You will find much information about ventilation and heating in the following books:

Shaw, W. N.: Air Currents and the Laws of Ventilation, 1907. Cambridge Univ. Press.
Monroe, W. S.: Steam Heating and Ventilation, 1902, New York, Engineering Record Series.
Harrington: Practical Hygiene, 1902, Lea Brothers.
Notter, J. Lane: Treatise on Hygiene, 1908, Blakiston.

You state that the inlet for pure air is near the ceiling but do not say whether the incoming air is warm or cold. The problem is one of heating as well as ventilation. If the incoming air is warm it will tend to remain near the top of the room. If the outlet is high in the wall the warm air will tend to pass out without either warming the room or materially changing the air of the room. If the outlet for air is at the floor the warm air after raising the temperature of the room will sink and pass off at the bottom.

Carbon dioxid itself in the quantity ordinarily found in rooms is harmless. It is simply taken as an indicator of vitiated air. The amount of carbon dioxid added to schoolroom air by respiration is slight, seldom more than 10 parts per 10,000. Experiments have shown that people confined in small, tight compartments endure without any symptoms of illness or discomfort an atmosphere containing 150 parts of carbon dioxid per 10,000, provided the temperature and moisture are kept low. Tests in crowded schoolrooms under similar conditions show that the pupils are unaffected. Results are different if the temperature is allowed to rise to 70 F. and the humidity is high. It seems well established that results commonly attributed to poor ventilation are not due to any change in chemical composition of the air but to physical changes. The solution of the problem of ventilation lies in the maintenance of the normal heat interchange between the body and the surrounding air.

Whether expired air will rise or sink depends on several factors, its temperature, amount of CO_2, moisture content and the temperature of the surrounding air. Taking what is perhaps an average density for expired air, if the temperature of the surrounding air is below 81 F. the expired air will tend to rise. The expired air will tend to sink if the temperature of the surrounding air is above 81 F. and neither rise nor fall if the surrounding air is at this critical temperature. The expired air will sink to the floor after rising and cooling, as it will tend to do in a room temperature of 70 F. unless the flow of air downward made by forced draught is overpowering.

XUM

THE POSSIBILITY OF DUPLICATION OF THE APPENDIX

To the Editor:—In THE JOURNAL (Jan. 21, 1911) Dr. W. G. Young reported a case in which he had at one operation removed two appendixes. The story raised my doubts. Nevertheless, when I was a medical student we made no study of embryology, or of comparative anatomy, and I had made no special investigation of the appendix along either of these lines. Dr. G. K. Dickinson of Jersey City published an article on "Appendicitis and Its Moving Pathology" in the *Journal of the Medical Society of New Jersey*, March, 1911, which showed careful study of the morphology of the appendix. I wrote asking him if it were a physical possibility for one cecum to have two appendixes, and referring him to the report in question. He replies that he had felt surprised that the editor of THE JOURNAL had allowed the article to be published. He says that embryologically it is "impossible for a cecum to segregate into two appendicular portions. There is nothing in comparative embryology which would permit us to expect such an anomaly. So for as I know, no surgeon of reputed careful observation has seen the human cecum with two appendixes." He says that he thinks that in the reported cases a colonic tab or a diverticulum of the small intestine (Meckel's), has been mistaken for a real appendix.

I have on at least three occasions, perhaps four, removed an appendix from a patient, from whom a previous operator asserted that he removed one, but the previous operators were all men of very limited experience, and their failure to find the appendix was not surprising. One of them, indeed, brought his patient to me a few months after the operation, and admitted that he had "failed to find" it.

It seems to me that it would be well to bring up in some way an issue in this instance, and not allow this reported case to go unchallenged. There may be ignorant surgeons and dishonest surgeons, but I do not believe that any human cecum ever had two appendixes. B.

ANSWER.—Supernumerary appendices are very seldom seen. Indeed, Heineck (*Chicago Med. Times*, 1908, xli, 197) who studied over 3,000 cases failed to observe a single instance. Nevertheless there is found in Verheyn's "Anatomy," 1704, but not in the 1710 edition, a cut showing an "ordinary" and an "extraordinary" processus vermiformis. Fleischmann and Meckel are quoted by Strengel ("Appendicitis," 1906, p. 7) as having observed double appendices. But Kelly ("Vermiform Appendix," 1905, p. 105) states: "In regard to misplaced and supernumerary appendices most of these can be accounted for on other grounds." More recently McCook (referred to in *American Practice of Surgery*, 1910, xliv, 624) has reported an appendix having a bifid base. Rosenberger (*Proc. Path. Soc.*, Philadelphia, 1902, vi, 205) describes a processus vermiformis having two distinct lumina each with its mucosa, lymph-nodes and muscularis; and Prentiss (*Washington Med. Ann.*, 1906, p. 25) under the title, "A Double Appendix" says: "I wish to present a microscopic slide of an appendix having two distinct lumina."

From the meagerness of the literature it is plain that anomalies as to number in this organ are exceedingly rare and that most careful observations should be made in cases of apparent duplications so as not to mistake Meckel's diverticulum or other formations for an appendix.

The Public Service

Medical Department, U. S. Army

Changes for the week ended May 6, 1911.

Wallace, George S., M.R.C., reported for duty at Presidio, Texas.

Napier, Edward L., lieut., reports for duty at Yuma, Ariz.

Frick, Euclid B., lieut.-col., will, in addition to his present duties, assume the duties of medical supply officer, Provincial Brigade, Point Loma, Cal.

Freeman, Charles E., captain, relieved from duty as medical supply officer, Provisional Brigade, Point Loma, Cal., and ordered to duty with troops designated to proceed to Yosemite National Park, Cal.

Johnson, Thomas H., lieut., relieved from duty with Provisional Brigade, Point Loma, Cal., and ordered to duty with the troops designated to proceed to Segnoia National Park, Cal.

Fisk, Owen C., sick leave of absence extended one month.

Maloney, James E., M.R.C., honorably discharged from the service of the United States, his services being no longer required.

Griffis, F. G., M.R.C., reported for temporary duty at Fort Mackenzie, Wyo.

Long, C. J., reported for temporary duty at Fort McKinley, Maine.

Grubbs, Robert B., major, granted thirty days' leave of absence when his services can be spared, with permission to apply for thirty days' extension.

Medical Corps, U. S. Navy

Changes during the two weeks ended May 6, 1911.

Payne, J. H., acting assistant surgeon, appointed acting assistant surgeon from April 20, 1911.

Stalnakeer, P. R., P. A. surgeon, detached from the naval station, Culebra, P. R., and ordered home to await orders.

Shepard, G. W., asst.-surgeon, detached from the naval station, Culebra, P. R., and ordered home to await orders.

Hayden, R., P. A. surgeon, detached from the naval hospital, Norfolk, Va., and ordered to duty at the Naval Medical School Hospital, Washington, D. C.

Dickinson, D., Jr., A. A. surgeon, appointed acting assistant surgeon from April 28, 1911.

Hale, G. D., P. A. surgeon, ordered to duty at the naval hospital, Las Animas, Colo.

Sutton, D. G., P. A. surgeon, detached from the *Des Moines* and ordered to the *Indiana*.

Rose, M. E., asst-surgeon, resignation accepted, to take effect on arrival of *Celtic* in the United States.

Jacoby, A. L., asst.-surgeon, detached from the *Mayflower* and ordered to the *New Hampshire*.

Hough, F. P. W., asst.-surgeon, detached from the *New Hampshire* and ordered to the *Des Moines*.

Miller, O. J., A. A. surgeon, detached from the naval medical school, Washington, D. C., and ordered to the marine recruiting station, Buffalo, N. Y.

U. S. Public Health and Marine-Hospital Service

Changes for the seven days ended May 3, 1911:

Irwin, Fairfax, surgeon, directed to proceed to Nagasaki, Japan, on special temporary duty.

Lavinder, C. H., P. A. surgeon, granted twenty-one days' leave of absence from May 3, 1911.

Vogel, C. W., P. A. surgeon, directed to report to the Bureau, Washington, D. C., for conference.

Bryan, W. M., asst.-surgeon, granted twenty days' leave of absence from May 1, 1911.

Porter, Joseph Y., quarantine inspector, directed to proceed to Tampa Bay Quarantine Station on special temporary duty.

Fisher, C. E., acting asst.-surgeon, granted seven days' leave of absence from May 1, 1911.

Medical Economics

LEGISLATIVE SUMMARY

The following summary indicates the situation in the various state legislatures, many of which have adjourned.

ALABAMA

The legislature has adjourned. The only important medical legislation enacted was to amend the medical practice act, making it unlawful for physicians to advertise so as to mislead the people in regard to health matters, and granting the right of appeal to the supreme court in all cases involving the revocation of license, right of appeal being granted to either party.

CONNECTICUT

The legislature is still in session. The senate optometry bill has been rejected by both houses. The house optometry bill is before the senate. An antivivisection bill has been rejected by the house.

ILLINOIS

The legislature will adjourn May 19. The senate bill regarding common drinking-cups has passed the senate. Other bills of medical interest are practically in the same position as when last reported. Senate bill 235, to amend the medical practice act, has passed the senate and is in the judiciary committee of the house. The vital statistic bill is on third reading in the house. The sectarian bills are in committees, as previously reported.

IOWA

A bill to appropriate $2,000 for antitoxin, a bill to appropriate $2,000 for the vital statistics department, a bill to authorize the sterilization of criminals and a bill requiring disinfection of premises previously occupied by cases of tuberculosis or infantile paralysis, have become laws. The osteopathic bill was defeated. A bill to reorganize the state board was also defeated.

KANSAS

The state legislature has adjourned. A vital statistic bill, modeled on the American Medical Association bill, became a law. A tuberculosis sanatorium was established and money was appropriated to carry on campaign of education against tuberculosis.

MAINE

The state legislature has adjourned. A revised medical practice act was passed and an osteopathic bill was defeated in both houses. A bill to prohibit physicians from insuring themselves against damage suits for malpractice was also defeated.

MICHIGAN

The legislature has adjourned. The following bills have become laws: A bill to require physical training to be taught in the city schools; a sane Fourth of July bill; a bill placing all maternity hospitals under the state board of health and a bill to require local boards of health to report all cases of tuberculosis. The chiropractic bill was defeated.

MISSOURI

The legislature has adjourned. No bills of special interest to the medical profession have been enacted. The optometry bill was defeated.

NEBRASKA

The legislature adjourned April 2. A bill was passed to establish a board of control for state institutions, also bill to establish a state tuberculosis hospital and appropriating $40,000 for its maintenance. An appropriation of $75,000 was made for the enlargement and maintenance of the state orthopedic hospital. An appropriation of $100,000 was made for new buildings for the state hospital for the insane.

NEW HAMPSHIRE

The legislature has adjourned. A bill to consolidate the three existing boards of medical examiners into one, failed to pass. An optometry bill became a law. An osteopathic bill was defeated. A bill to forbid the use of common drinking-cups became a law.

OHIO

The legislature is still in session.

OKLAHOMA

The state legislature has adjourned. An optometry bill became a law.

OREGON

The legislature has adjourned. A bill to empower the state board to prosecute illegal practitioners failed to pass.

PENNSYLVANIA

The legislature is still in session. No laws of special interest to physicians have been adopted. A bill to provide for a single board of medical examiners has passed the senate and is now in the house. A midwifery, a neuropathic and an optometry bill are in committees.

TEXAS

The legislature has adjourned. The sanitary code drafted by the state board of health was enacted as a part of the statutes. A state tuberculous sanatorium and a state leprosarium were established.

UTAH

The legislature has adjourned. A new medical practice act was passed, also a bill to require physicians and midwives to report all cases of blennorrhea in new-born children within six hours of its appearance.

WISCONSIN

The legislature is still in session. No laws of interest to physicians have as yet been passed.

POSTGRADUATE COURSE FOR COUNTY SOCIETIES

DR. JOHN H. BLACKBURN, DIRECTOR
BOWLING GREEN, KENTUCKY

[The Director will be glad to furnish further information and literature to any county society desiring to take up the course.]

Tenth Month—Third Weekly Meeting

CAUSES OF SUDDEN DEATH (CONTINUED)

DEATH FROM COLD: Symptoms. Post-mortem appearances.

DEATH FROM HEAT: Symptoms. Post-mortem appearances.

DEATH FROM STARVATION: Acute and chronic. Symptoms. Post-mortem appearances.

DEATH FROM ELECTRICITY: From electric current, from lightning, or by electrocution. Post-mortem appearances.

INFANTICIDE: By commission or by omission. Evidences of live birth. Appearances of lungs, hydrostatic test. Other organs and tissues. Duration of child's life. Cause and manner of death.

Society Proceedings

COMJNG MEETINGS

AMERICAN MEDICAL ASSOCIATION, Los Angeles, June 27-30.

American Assn. of Genito-Urinary Surgeons, New York, June 1-3.
American Academy of Medicine, Los Angeles, June 23-26.
American Dermatological Association, Boston, May 25-27.
American Climatological Association, Montreal, Canada, June 13-14.
American Gynecological Society, Atlantic City, May 23-25.
American Laryn., Rhin. and Otol. Society, Atlantic City, June 1-3.
American Laryngological Association, Philadelphia, May 29-31.
American Medico-Psychological Association, Denver, June 19-20.
American Neurological Association, Baltimore, May 11-13.
American Orthopedic Association, Cincinnati, May 15-17.
American Otological Society, Atlantic City, June 26-27.
American Pediatric Society, Lake Mohonk, May 31-June 2.
American Proctologic Society, Los Angeles, June 26-27.
American Society of Tropical Medicine, New Orleans, May 18-19.
American Surgical Association, Denver, June 19-21.
American Therapeutic Society, Boston, May 11-13.
Conf. of Bds. of Health of N. America, Los Angeles, June 30-July 1.
Connecticut State Medical Society, Hartford, May 24-25.
Illinois State Medical Society, Aurora, May 16-18.
Iowa State Medical Society, Des Moines, May 17-19.
Louisiana State Medical Society, Shreveport, May 30-June 1.
Maine Medical Association, Augusta, June 28-29.
Massachusetts Medical Society, Boston, June 13-14.
Missouri State Medical Association, Kansas City, May 16-18.
Nat'l Assn. for Study and Prev. of Tuberculosis, Denver, June 20-21.
National Association for Study of Epilepsy, St. Louis, June 16.
New Jersey, Medical Society of, Spring Lake, June 13-15.
North Carolina, Medical Society of State of, Charlotte, June 20.
Rhode Island Medical Society, Providence, June 1.
Wisconsin, State Medical Society of, Waukesha, June 7-9.

MISSISSIPPI STATE MEDICAL ASSOCIATION

Annual Meeting, held at Jackson, April 10, 1911

The President, DR. J. W. YOUNG, Grenada, in the Chair

A list of the officers elected was given in THE JOURNAL, April 29, page 1271.

Delegates to the Los Angeles Session of the American Medical Association were instructed to vote against the proposition to make membership in the state associations include membership in the national organization.

Addresses of welcome were made on behalf of the city of Jackson by Hon. A. F. Crowder, mayor of Jackson, and on behalf of the Hinds County Medical Society by Mr. W. H. Watkins. These were responded to by Dr. H. M. Folkes of Biloxi.

President's Address: Value of a Good Physician to the Public

DR. J. W. YOUNG, Grenada: I thank God that every real true physician is a gentleman; and an optimist, and an altruist, a "jolly good fellow," and an all-round good citizen—loyal to the flag, loyal to the courts, loyal to his patrons, loyal to everything that is good and true—but, alas, in so many instances he is not loyal to his fellows, or his state and county medical societies. We are altruists for everything and everybody except each other. Why can we not be colleagues rather than competitors? Instead of knocking, why can we not occasionally, at least, take a fellow-doctor by the hand and say: God bless you, my brother, I wish you well and hope you are prospering? No man in any community is more valuable to the public than a good, reliable physician. Others may bring personal comforts, wealth and material conveniences, but on the physician the people must rely to guard their physical welfare, without which wealth would be of little value. In mere money, the value of his services can never be counted.

Medicine in all ages has attracted to its ranks the most self-sacrificing members of society. Medical men stand alone on the earth, they only are striving with their whole might to extinguish their own business. They preach temperance, virtue and cleanliness, knowing well that when people come to follow their advice their occupation, like Othello's, is gone. The time has come when the medical profession must wake up to the fact that it has been largely ignored in the past. The heroism displayed and martyrdom suffered in the medical profession will never be known. There is a quietness about it that distinguishes it as true heroism. We hear little of the many instances of blood poisoning from treating a septic wound; of the brave stand against the most deadly epidemics, of physicians courting death in the most loathsome forms, away from the comforting touch of loved ones, that the sick

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and dying may not have to fight alone their battle with the pestilence. What a true physician could not be hired to do for all the money the world could offer, he will do joyfully and without expectation of reward, from the higher sense of duty and his love for mankind.

Physicians all over the land have given up their lives in efforts to save others, often leaving loved ones in penury and want. Has anyone ever said that they were heroes, or has any one ever proposed that their dependent ones should share in a hero fund? Nay, verily. The physician walks amid the ruin and desolation of pestilence; he goes forth to dare and do in a supreme effort to save the lives of his fellowmen. Think of the thousands who are being saved from untimely graves by and through the recent discoveries of medical and sanitary science. Think of what Reed and Carroll and Lazear did for mankind in subjecting themselves to the deadly virus of yellow fever to prove the mosquito origin of that disease. Think of what Jenner and Simpson, and Marion Sims, Crawford W. Long and Ephraim McDowell and Koch and others have done for the world. Nearly every organization of any kind has a pension fund. All Christian denominations provide funds for their aged and superannuated preachers. A fund is provided to pension all college professors after twenty-five years of service. All United States judges, from highest to lowest, and all army officers, whether they have seen any service or not, are permitted to retire on a pension at the age of 65. Every Union soldier is the recipient of a monthly stipend from Uncle Sam's treasury. A good physician who has literally worn himself out toiling and working to save the lives of others, when he is no longer able to work, has any one ever been heard to even suggest a pension for him? Nay verily. "Earth's heroes who have gone down in battle or who have been sacrificed to maintain their solemn convictions of duty to country or religion, deservedly receive the honor and praise given them. The hero dead who sleep in the National or Confederate cemeteries of the land are rightfully held in loving remembrance by the people of the sections for which they fought and died, and no one calls in question the homage paid them in holding them dear to memory," but there are other heroes just as deserving of praise, the many true and noble physicians who have died in the line of every-day duty, and gone down to death in the fulness of loyalty to that duty.

This is the life and character of a true physician, and this leads me to the inquiry: Why is it that we as physicians, individually and collectively, have so little influence, and fail so often to get the ear of our legislators? We have never asked for anything for our own personal benefit. All that we have ever asked for was looking to the general welfare of the commonwealth, and rather to our financial detriment than otherwise. It is because of the petty jealousies and the knocking in our own ranks. We are never a unit on anything. As an instance: Several years ago this association passed a resolution declaring that we would not examine for any of the old line insurance companies for less than $5.00, and only a few weeks ago an agent of one of these companies told me that they have an examiner in nearly every city and town in Mississippi and are only paying a minimum fee of $3.00. We always agree to disagree, and hence a house divided against itself must—as a matter of course—fall. Thus by our own action are we discredited by the public at large.

It is usually possible to get an appropriation from the legislature for the study and cure of animal diseases, but when physicians go before the legislature and state that 3,000 Mississippians are annually dying from the great white plague, and half as many from typhoid fever—both preventable diseases—and ask for an appropriation to stay the spread and ravages of these diseases, the door is slammed in our faces and we are charged with the fact that as physicians we cannot agree as to what we want.

On this occasion, therefore, I plead for harmony in our ranks—I plead for better feeling toward and more love for each other—I plead for a fuller exercise of the virtues and graces which should characterize the life of every true physician—I plead for a greater interest in our county and state associations. The very youngest of us has but a very few years on earth; then how much better we must feel when we come to die to know that we have always loved our fellows—to know that we have been kind and loving colleagues, rather than ugly and mean competitors.

Treatment of Chronic Tuberculous Sinuses with Bismuth Paste. Removal of Birth-Marks by Carbon-Dioxid Snow

Dr. S. H. McLean, Jackson, reported a case of tuberculous abscess treated with bismuth paste and one of nevus treated with carbon-dioxid snow. He described in detail the methods of using these remedies.

DISCUSSION

DR. J. H. FOX, Jackson: Dr. Beck in treating tuberculous sinuses always administers the paste in liquid form to allow it to enter all cavities. He advises that it be applied warm. He also advises the placing of an ice pack over the sinus to prevent the bismuth paste running out. My attention was first called to carbon-dioxid snow by Dr. Gaskell. I have had splendid results with this treatment. I collect the snow in a manner similar to Dr. McLean's method. The time of application varies. In the case of black moles it must be applied longer than in some other cases.

DR. W. C. CAMPBELL, Memphis: These abscesses are better not opened. The treatment should not be begun until the sinus is three months old. About once a week or five days I fill the cavities. I have seen harm done by giving too much of this paste—with a little care this can be avoided.

Lobar Pneumonia in Infancy

DR. B. H. BOOTH, Drew, living in a malarial district, is accustomed to use quinin in all cases of pneumonia and believes it shortens the course of the disease and lessens its severity. He discusses the variations in pathology and treatment in the disease in children as compared with these in adults.

DISCUSSION

DR. S. S. CAROTHER, Duck Hill: In my opinion, the danger in giving quinin during the progress of pneumonia is too great.

DR. J. G. GAITHER, Oxford: I use no turpentine, but petrolatum and mustard, 1 part mustard to 16 parts of petrolatum. The patient is anointed daily.

DR. G. W. WALLACE, Arbo: I keep these patients in bed and not in their mother's arms. They are allowed to nurse. The child should be kept very quiet.

DR. B. S. WALLER, Silver Creek: I have noticed great difficulty in breathing. I usually make a plaster with a few drops of turpentine, sometimes a little glycerin.

DR. F. M. BROUGHER, Belen: It is necessary to keep the lungs warm. I have found quinin of no value in treatment of pneumonia.

DR. B. H. BOOTH, Drew: I use quinin because it is a stimulant to a certain extent. In regard to keeping the child in bed, I should like to know how one can keep the child quiet so easily as in its mother's arms.

(*To be continued*)

MEDICAL SOCIETY OF THE STATE OF NEW YORK

One Hundred and Fifth Annual Meeting, held at Albany, April 18-19, 1911

(Continued from page 1354)

Discussion on Salvarsan (Concluded)

DR. V. C. PEDERSEN, New York: I want to warn against the indiscriminate use of the intravenous injection of salvarsan; this is a surgical procedure of no small importance. It was my misfortune recently to have a case of nearly fatal collapse after the intravenous injection of this drug. Three weeks before the injection the man was examined very carefully as to his heart and arteries and kidneys and they were found to be normal, so far as one could judge in a man who had had syphilis for twenty-one years.

DR. J. M. SWAN, Watkins: I have recently had a patient with an infected antrum in whose case the infective organism was supposed to be the *Treponema pallidum* and in whom the

Wassermann reaction was said to be positive. The blood had been taken three times, twice from a finger puncture, and once from wet cupping of the back. In my opinion a Wassermann test made in this way is valueless and should not be interpreted as an indication for administration of salvarsan or any other antisyphilitic remedy.

DR. EDWARD D. FISHER, New York: Mercury has a curative effect on syphilis, and so has salvarsan. Mercury is not supposed, by most of us, to have any curative effect on parasyphilitic conditions, such as general paresis or tabes. A few of the manifestations that may occur in tabes, such as ptosis, or ocular muscle paralysis, which have been shown to disappear by the use of salvarsan have been known also easily and quickly to disappear with the use of mercury. My position at present in reference to the use of salvarsan in organic nervous diseases is that probably this drug will be as ineffective as mercury. In view of its tendency to induce degeneration, and especially in certain nerve fibers, it is too dangerous a drug until we get further reliable information to use it in these diseases.

The Relationship of Tabes Dorsalis to General Paralysis; Are They the Same Disease Differing Only in Situation of the Lesion?

DR. EDWARD D. FISHER, New York: While both diseases are parasyphilitic or metasyphilitic manifestations of a primary syphilis, tabes in its classical or typical form rarely or never presents mental or cerebral symptoms characteristic of general paresis. Tabes is a chronic progressive disease, confining its lesions to the posterior spinal nerve ganglion, posterior nerve roots, posterior columns and meninges of the spinal cord, and the cranial nerves, especially the oculomotor and optic. General paresis is a disease comparatively acute, as compared with tabes, running its course in three years, while the former may continue for twenty years or longer. Its lesions are chiefly cerebral, involving the meninges and cerebral neurones, to a slight degree the cranial nerves, as the optic nerve and the superior nucleus of the oculomotor nerves. The spinal lesions are rarely systemic in type, but fall under the head of a diffuse or combined sclerosis of the spinal columns. In 100 cases of general paresis of the optic or cerebral and tabetic type, only one resembled a classical case of tabes. Clinically the symptoms from cases observed in hospital, dispensary and private practice, while approaching each other in a minor degree, essentially differ in intensity in the more marked symptoms. In tabes, the ataxia is much more extreme, and the lightning pains and crises are much more frequent and disabling. The ocular manifestations are much more constant than in general paresis, whether of the cerebral or tabetic type. It is impossible to believe that a disease essentially spinal in its symptomatology and lasting usually at least twenty years can be the same, differing only in the site of the lesion, as a disease limited usually to three years or even in the unusual or extreme cases to ten years.

DISCUSSION

DR. E. B. ANGELL, Rochester: The tendency seems to be to disregard the so-called systemic manifestations of degenerative diseases, and ultimately, so far as possible, to include them under one general classification. Clinically, Dr. Fisher is right, and I believe, so far as treatment and recognition of methods of treatment are concerned, that his views are perfectly sound, but it is rather early yet to come to a definite conclusion regarding this matter.

DR. W. W. KIDDER, Oswego: Tabes is a disease of a definite tract and associated clinically with a definite set of functions which are less general than the functions of the parts affected by general paresis; and from the limitation of the original tabetic affection we would naturally expect it to trespass less on the tissues which are involved in paresis than we would expect the paretic affection to trespass on the tissues affected by tabes.

Paralysis of the Upper Extremity Due to Nerve Injury

DR. N. JACOBSON, Syracuse: This paper is based on four cases: Two involve the musculospiral nerve, one is a complication of fracture of the humerus, the other is the result of a lacerated wound in the lower part of the arm. The third patient sustained a fracture of the neck of the scapula, implicating the brachial plexus, and the fourth case was due to a penetrating wound of the neck severing the fifth cervical nerve. In each instance more or less complete paralysis resulted which was improved or entirely cured by surgical operation.

Experience of the Army With Vaccination as a Prophylactic Against Small-Pox

COL. JOHN VAN R. HOFF, Medical Corps, U. S. Army: Wars have taught us that the mobilization of military resources promotes the incurrence of small-pox in armies, and all experience has shown that efficient vaccination and revaccination absolutely control it. We of the medical department would be loath to return to conditions under which one-tenth of mankind died of small-pox, and which obtained up to the beginning of the nineteenth century. These conditions ceased with the application of Jenner's discovery and since have been effectually controlled by vaccination. In spite of all these facts, it is asked: Does vaccination really grant immunity from, or lessen the severity of, small-pox? Is not the gradual disappearance of this infection due to isolation and sanitation? The answer is obvious. Of isolation Chapin writes:

> Small-pox is less likely to escape detection than is any other disease. Yet epidemics grow in the face of the most rigid isolation. Unrecognized cases, even in this disease, are so numerous that the isolation of the recognized cases often seems to be a complete failure. The state board of health of Minnesota, realizing this, has had the boldness to advise that no attempt be made to isolate, and that entire reliance be placed on vaccination. It was hoped that this would lead to more complete vaccination. There has been no alarming increase in small-pox in Minnesota.

A century or more ago tuberculosis and small-pox shared almost equally the unenviable reputation of being the most potent causes of mortality in the human race. To-day tuberculosis still maintains its evil reputation, but among enlightened people the mortality from small-pox is negligible. While sanitary standards and practice have measurably advanced since 1797, they have not yet greatly changed the mortality rate for tuberculosis. Why should they have so marvelously affected that for small-pox? They have not, and we are forced to the conclusion that to vaccination and revaccination alone are we indebted for power to control this formerly devastating and deadly infection. The great blessings of vaccination are not bought for nothing, though they are purchased at a very trifling cost.

Diagnosis of Common Tropical Infections

DR. S. M. SHOOK, U. S. N.: New York furnishes a large number of cases of the tropical infections, two of the most important of which, malarial fever and amebic dysentery, may be acquired in the state. Diagnoses of the intestinal infections due to animal parasites may be easily made by examination of a fluid stool. Blood examinations for malarial parasites may be readily made with a good polychrome stain which is stable.

Fracture of the Tarsal Bones

DR. F. H. ALBEE, New York: Direct trauma to the plantar surface of a foot is likely to cause a fracture of the tarsal bones. In every case diagnosed as flatfoot, whenever a slight injury has occurred, the patient should be examined for fracture of the tarsal bones. This should include an *x*-ray examination. An important feature in treatment of fresh fractures, is to keep patients from weight-bearing, for at least six weeks, and then only with the aid of an arch support for two or three months longer. The best results are obtained in the treatment of fresh tarsal fractures. One of the essential features in the management of these fractures is attention to the changed fatty conditions. This is especially true in the old neglected cases.

Arteriosclerosis or the Cardiovascular Disease

DR. L. F. BISHOP, New York: In treatment of cardiovascular disease the Nauheim methods are of much value, although it is not easy to define the route by which improve-

ment is brought about. By Nauheim method I mean change of mode of life, environment, change of diet, removal from work and worry, carbonated baths and resistance exercises. It has seemed to me that possibly the carbonated baths in some way promote the elimination of indol and its allied products through the skin. The most important thing in treatment of a case depending on intestinal putrefaction is the regulation of food, the use of suitable cathartics, and the encouragement of the germs of lactic acid fermentation by the use of the less fermentable carbohydrates. Recently I have been using milk sugar. Abdominal conditions, such as enteroptosis and gastroptosis must be attended to. Alkaline mineral waters by counteracting the natural acidity of the intestinal tract often do great harm which appears as a most intense auto-intoxication, after a course of such treatment. I saw a patient this winter in whom, following a severe alkaline reduction cure, there was such intense poisoning of the heart muscle from auto-intoxication that chronic fibrillation of the auricle resulted. The question of alcohol and tobacco must be decided according to the individual case.

DISCUSSION

DR. D. AYERS, Fort Plain: The principal cause of trouble in these cases is intestinal putrefaction, a general condition of auto-intoxication. It is estimated that about 90 per cent. of the general practice in my section of the state is in connection with conditions dependent on auto-intoxication. I have under observation a woman, aged 74, whose blood-pressure was 260 plus; I do not know how much more than that it was because the scale does not run any higher. She is dizzy most of the time. She has been very toxic for years, and has been constipated ever since she can remember. She has always been a good eater and is jaundiced most of the time. Occasionally she has hemorrhage from the nose. The retinal vessels are very much engorged and varicosities appear. Recent treatment reduced the blood-pressure below the point mentioned, but it is still very high.

DR. E. B. ANGELL, Rochester: I am not yet ready to say whether it is intestinal putrefaction or inefficient elimination of the nitrogen material through the kidney that is the cause of most of the symptoms in these cases. However, there is no doubt but that the over-ingestion of meat, or the over-ingestion of nitrogenous food, has more to do with cardio-vascular disease than any other one thing. We must bear in mind that meat tends to putrefactive conditions in the intestinal tract.

DR. J. M. SWAN, Watkins: Arteriosclerosis is not an inflammation, but a degenerative change dependent on a great many varying causes, the intemperate use of alcohol and tobacco being among them. But a great many people who have never used alcohol and tobacco, who have had the acute infectious diseases, and who have indulged in the overeating of proteid food as well as carbohydrate foods, have improper elimination of the end-products of these substances on account of insufficient exercise. The disease is a general one, but its symptoms may be manifested in one of three main places: in the kidneys, producing nephritis; in the heart muscle, producing fibromyocarditis, and in the brain, producing the various brain symptoms of arteriosclerosis.

DR. H. SCHOONMAKER, Clifton Springs: When we resort to the so-called starvation treatment, that is, putting these patients to bed and keeping them on a milk diet, cleaning the bowels out and giving them rest and sufficient water to drink, it is surprising how much better they get. It has been my observation that the carbon dioxid bath, the so-called Nauheim bath, unless it is materially modified, does not do so well for the patient as the sweating bath.

DR. F. D. REESE, Cortland: Patients with arteriosclerosis should be put on a restricted diet. I do not care so much what a man eats as I do the amount he consumes. If you can get the confidence of a patient, you will gain one point, then tell him to fast every other day. This seems harsh treatment, but it is the most effectual treatment in arteriosclerosis or high blood-pressure of anything I have prescribed.

(To be continued)

Medical Education and State Boards of Registration

COMING EXAMINATIONS

KENTUCKY: The Armory, Louisville, May 31. Sec., Dr. J. N. McCormack, Bowling Green.

LOUISIANA: Regular, New Orleans, May 18-20. Sec., Dr. A. B. Brown, 108 Baronne St.

NEBRASKA: State House, Senate Chamber, Lincoln, May 24. Sec., Dr. E. Arthur Carr, 141 S. 12th Street.

NEW YORK: May 23-26 and June 27-30. Mr. Harlan H. Horner, Chief of Examinations Division, Department of Education, Albany.

WISCONSIN: Milwaukee, May 24-26. Sec., Dr. John M. Beffel, 3200 Clybourn St., Milwaukee.

New Board in Oklahoma

The Oklahoma State Board of Medical Examiners, as at present constituted, consists of Dr. F. B. Fite, Muskogee, president; Dr. R. E. Sawyer, Durant, vice-president; Dr. F. A. Englehart, Oklahoma City, treasurer; Dr. John W. Duke, Guthrie, secretary; Dr. M. Gray, Mountain View; Dr. Leroy Long, McAlester; Dr. J. O. Wharton, Duncan; Dr. W. L. Bonnell, Chickasha, and Dr. Philip Herod, Alva. The first examination under the new board was held April 13, when thirty-two applicants were examined.

Iowa January Reciprocity Report

Dr. Guilford H. Sumner, secretary of the Iowa State Board of Medical Examiners, reports that at the meeting held at Des Moines, January 24, 1911, twenty candidates were licensed through reciprocity. The following colleges were represented:

LICENSED THROUGH RECIPROCITY

College	Year Grad.	Reciprocity with
Rush Medical College	(1910)	Illinois
	(1896)	Nebraska
Northwestern University Medical School	(1906)	Illinois
	(1907)	Illinois
	(1898)	Wisconsin
Coll. of Med. and Surg., Physio-Medical, Chicago	(1886)	Wisconsin
College of Physicians and Surgeons, Chicago	(1906)	Illinois
Hahnemann Med. College and Hospital, Chicago	(1909)	Illinois
Chicago College of Medicine and Surgery	(1909)	Illinois
State University of Iowa, College of Medicine	(1908)	Illinois
University of Louisville	(1910)	Illinois
College of Physicians and Surgeons, Baltimore	(1904)	Illinois
St. Louis College of Physicians and Surgeons	(1909)	Kansas
American Medical College, St. Louis	(1903)	Missouri
St. Louis University	(1906)	Missouri
University Medical College, Kansas City	(1910)	Missouri
Starling-Ohio Medical College	(1909)	Ohio
Jefferson Medical College	(1909)	Delaware
Woman's Medical College of Pennsylvania	(1907)	New Jersey
Medico-Chirurgical College of Philadelphia	(1898)	New Jersey

Utah April Report

Dr. G. F. Harding, secretary of the Utah State Board of Medical Examiners, reports the written examination held at Salt Lake City, April 3-4, 1911. The number of subjects examined in was 21; total number of questions asked, 100; percentage required to pass, 75. The total number of candidates examined was 5, of whom 3 passed, including 1 osteopath, and 2 failed. Five candidates were licensed through reciprocity. The following colleges were represented:

PASSED

College	Year Grad.	Per Cent.
Georgetown University	(1908)*	
Jefferson Medical College	(1910)*	

FAILED

Gross Medical College	(1895)	56
Keokuk Medical College, Coll. of P. and S.	(1905)	73

LICENSED THROUGH RECIPROCITY

College	Year Grad.	Reciprocity with
College of Physicians and Surgeons, Keokuk	(1898)	Iowa
Michigan College of Medicine and Surgery	(1895)	Michigan
Northwestern Medical College, St. Joseph	(1892)	Iowa
Kansas City Hahnemann Medical College	(1904)	Kansas
Albany Medical College	(1908)	New York

* No percentage given.

Medicolegal

License and Proof Required to Recover for Services—Evidence Against Charge of Malpractice—Wealth of Patient Cannot Be Shown to Justify Fee

The Court of Civil Appeals of Texas reverses, on the appeal of Swift vs. Kelly (133 S. W. R. 901), a judgment obtained by the latter party, a physician who brought the action to recover for professional services. The court says that the defendant insisted that the lower court erred in overruling his general demurrer to the plaintiff's petition, in that it failed to show that the plaintiff was authorized by law to practice as a physician and surgeon and to maintain a suit to collect for such professional services. That contention is sustained.

By the Texas statute, as amended by the legislature in 1901, boards of medical examiners were established, a license from which was required as a condition precedent to the right to practice medicine and surgery in the state; and one article provides that any person who shall practice medicine, surgery or midwifery in the state in violation of the statute shall be fined or imprisoned, and it shall not be lawful for him or her to recover by action, suit, motion or warrant, any compensation for such services. It is well settled that a physician practicing in Texas without the license required by the statutes cannot recover for his services. A compliance with the requirements of the law regulating the practice of medicine and surgery having been made a condition precedent to the right to so practice, it is necessary for one suing to recover for such services to allege and prove such compliance, and a failure to so allege in the petition is fatal on general demurrer thereto.

It is also well established that, in the absence of proof to the contrary, it will be presumed that the laws of other states are the same as the laws of Texas on the same subject. The plaintiff failed to allege in what state his services were performed. If they were performed in Texas, then the Texas statutes would apply as a matter of course. If performed in some other state, then the presumption would obtain that the same statutes had been there enacted and were in force. It was not sufficient that he alleged in his petition that he resided in a certain other state, was a physician and surgeon, practicing his profession in such state, and was a professor in a university in such state.

Then, over the defendant's objection, the plaintiff was permitted to introduce in evidence the defendant's promissory note in the plaintiff's favor for $500 of the amounts sued for, and also letters and telegrams from the defendant to the plaintiff requesting an extension of time for its payment. The ground of the defendant's objection was that, as the suit was to recover on a promise to pay the reasonable value of the services, evidence showing a contract to pay a specific sum was irrelevant and incompetent. The evidence was not admissible to prove the value of the services rendered by the plaintiff. But, among other defenses, the defendant alleged unskilful and negligent treatment of him by the plaintiff, and offered evidence in support thereof. As against that defense, the court thinks the evidence to which the objection was made was admissible as the same would be in the nature of an admission at variance with the defendant's plea of unskilful and negligent treatment.

Lastly, this court is of the opinion that the lower court erred in permitting the plaintiff to show the reasonable value of his services by proof that the defendant was wealthy, coupled with further proof of a custom among physicians to graduate their charges according to the financial condition of the patient, and to charge a wealthy patient a higher fee by reason of his superior ability to pay. The suit was to recover the reasonable value of professional services rendered by the plaintiff. In 30 Cyc. 1600, it is stated that there is a conflict in the authorities on this question, and the announcement seems borne out by the decisions there cited. In Robinson vs. Campbell, 47 Iowa, 625, one of the cases cited, it was held that such testimony is not admissible, and the reasoning there advanced this court thinks is sound. Certainly no court would hold that the value of ordinary labor could be determined by such a test, and on principle this court can see no distinction between such a claim and one of the character now under discussion. If the recovery sought in this suit for professional services had been on an alleged implied contract by the plaintiff to pay such fees as are customarily charged for the same character of services performed for a patient of like financial ability to pay a fee therefor, then a different question would be presented, but, as the same is foreign to the record, the court foregoes a discussion of it.

Book Notices

MANUAL OF DISEASES OF WOMEN. By W. E. Fothergill, M.D., Assistant Gynecologic Surgeon, Royal Infirmary, and the St. Mary's Hospital. Cloth. Price, $3 net. Pp. 433, with 144 illustrations. New York: William Wood & Co., 1910.

Certain parts of this compendium will be found useful for the general practitioner, more especially the student and the nurse. The anatomy and embryology are handled exceptionally well. It is to be regretted that, in the chapter devoted to physical examination, the author has practically ignored asepsis. He has not even remotely suggested the use of rubber gloves, the sterilization of hands and instruments, or in any way recognized the need of protecting the examining physician, or emphasized the danger of infecting the patient with dirty technic. Several methods mentioned of preparation of the field of operation could well be relegated to the antiquities of surgery. In discussing the treatment of infections, the author warns against washing out the protective lactic acid bacilli in the vaginal secretions with the vaginal douche; yet further on, in contradiction to these views, he recommends the treatment of acute pelvic infections with the hot douche. Although the author intimates his belief in the radical removal of the glands and perimetric tissue in uterine carcinoma, he fails to recommend specifically or in any way to describe the radical Wertheim operative procedure.

AN INTRODUCTION TO SURGERY. By Rutherford Morison, M.A., M.B., F.R.C.S., Edin. and Eng., Professor of Surgery, University of Durham. Cloth. Price, $2.50 net. Pp. 162, with 151 illustrations. New York: William Wood & Co., 1911.

As its title indicates, this work is intended as a preliminary course for students in the study of general surgery. The author states in the preface that it is his aim to direct the student toward the main principles of diagnosis and treatment, thereby simplifying and making rational the treatment of the various surgical affections. In some particulars this object has been admirably realized. The chapters dealing with inflammation and sepsis are good, treating the subject in a practical and lucid manner. The same may be said of the treatment of the surgical diseases of the hollow viscera, the diagnosis of syphilis, tuberculosis and malignant disease, and also of the chapter on ulcers and gangrene.

On the other hand, it appears that comparatively too much space, which might better have been given to some subjects treated briefly, has been allotted to others of minor importance. Also, some subjects have been introduced which today are not ordinarily included in a course of general surgery. A little more accuracy in the definition of certain terms might have been exercised and the use of some obsolescent terms avoided.

The work is profusely illustrated with well-executed sketches, diagrams and photographs, which add not a little to its value as a students' text-book.

THE INFLUENCE OF STORAGE AND VARIOUS PRESERVATIVES ON THE DISSOLVED OXYGEN IN WATERS. By Dr. Arthur Lederer. Paper. Pp. 14. Sewage Disposal Investigations, the Sanitary District of Chicago, 1910.

The conclusion is drawn from a considerable number of chemical analyses that the addition of 1 c.c. per 8 ounces will preserve the content of dissolved oxygen in both unpolluted and polluted water for sufficient length of time for samples to be transported to the laboratory for examination. The percentage reduction of dissolved oxygen in stored samples is believed to constitute a "fair index of appreciable pollution."

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Current Medical Literature

AMERICAN

Titles marked with an asterisk (*) are abstracted below.

Southern Medical Journal, Nashville, Tenn.

April

1 Aneurysm of the Arch of the Aorta. J. B. Murfree, Murfreesboro, Tenn.
2 Cancer of the Cervix Uteri—Its Treatment. A. G. Payne, Greenville, Miss.
3 Pathology and Treatment of Ununited Fractures. J. N. Baker, Montgomery, Ala.
4 *The Artificial Leech in Acute Mastoiditis. U. S. Bird, Tampa, Fla.
5 *The Heath Mastoid Operation. M. M. Cullom, Nashville, Tenn.
6 *Operative Treatment of Fractures. C. W. Allen, New Orleans.
7 *Operative Treatment of Fractures of the Long Bones. J. L. Crook, Jackson, Tenn.
8 *Radical Cure of Painful Halux Valgus (Bunion). H. P. Cole, Mobile, Ala.
9 *Occurrence of Intestinal Parasitic Infections Among the White Patients at the Florida Hospital for Insane. R. N. Greene, Chattahoochee, Fla.
10 *Carbonic Acid Baths in Treatment of Heart Disease. J. H. Honan, Bad-Nauheim, Germany.
11 *Collapse of the Trachea While Performing Thyroidectomy. T. C. Witherspoon, Butte, Mont.
12 Anterior Poliomyelitis. O. H. Wilson, Nashville, Tenn.
13 Id. C. M. Nice, Birmingham, Ala.
14 Treatment of Anterior Poliomyelitis. A. W. Harris, Nashville, Tenn.
15 Certified Milk. D. T. McCall, Mobile, Ala.

4 and 5. Abstracted in THE JOURNAL, Nov. 26, 1910, p. 1920.

6. Abstracted in THE JOURNAL, Dec. 3, 1910, p. 2005.

7. **Fracture of the Long Bones.**—Crook reports four recent cases of fracture of both tibia and fibula in which he operated, and in all of which he secured good results, a result which, he says, could not have been obtained without operation.

8. **Painful Halux Valgus.**—Cole reports one case in which he used Mayo's method—resection of the head of the first metatarsus, removal of exostosis; restoration of joint by inserting flap of synovial tissue between stump of metatarsus and base of first phalanx. The result was perfect.

9. **Occurrence of Intestinal Parasitic Infections.**—Among 220 white men in the Florida Hospital for the Insane, Greene found ninety-two cases of uncinariasis, or a percentage of nearly 42. The 187 women examined showed a total of 87 cases of uncinariasis, or a percentage of nearly 47; 4 per cent. more women than men showed uncinariasis in this series. These examinations show for the total number of cases in the white departments of the hospital a percentage of nearly 44. Forty-two patients not showing hookworm infection, or a percentage of over 10, were infected with other forms of intestinal parasites, namely, trichocephalus trichiuris, oxyuris vermicularis and ascaris lumbricoides. Taking these other forms of intestinal parasites into consideration in the computation of the percentages would reveal the surprising result, that among the 407 persons examined, there were found 221 cases of intestinal worm infection, or a percentage of 54. Round worms were found associated with hookworms in two cases, one of these being in each sex. *Trichocephalus dispar* infection was noted with uncinariasis in twenty-six cases, sixteen among the women and ten among the men. Triple infection was noted in three patients, all men, the parasites present being *Uncinaria americana*, *Ascaris lumbricoides* and *trichocephalus trichiuris*. Greene advocates that every county and municipality appoint a physician for special work along this line, and that he should, under the direction of the State health officer, make at frequent intervals an examination of the feces of every individual within the limits of his prescribed area.

10. Abstracted in THE JOURNAL, Dec. 3, 1910, p. 2006.

11. Abstracted in THE JOURNAL, Jan. 14, 1911, p. 141.

New Mexico Medical Journal, Las Cruces

March

16 The Internal Ear in the Light of Recent Investigations. I. E. Friedman, Carlsbad.
17 The Medical Service and the Law. E. L. Medlar, Albuquerque.

Journal of the Delaware State Medical Society, Wilmington

April

18 Exophthalmic Goiter. H. F. Smythe, Odessa.

Journal of the Missouri State Medical Association, St. Louis

April

19 *Colon Bacillus Pyelocystitis in Infancy and Childhood. D. E. Broderick, Kansas City.
20 Experiences with Tuberculin Therapy in Dispensary Practice. S. T. Lipsitz, St. Louis.
21 *Teaching Medicine Aright. R. H. Jesse, Columbia.
22 Common Abuses of Surgery. W. F. Grinstead, Cairo, Ill.
23 Transposition of Appendix. B. B. Parrish, Kirksville.
24 What is the Key to the Permanency of a Voluntary Association of Individuals in a Common Cause? A. B. Freeman, Joplin.
25 Salvarsan in Syphilis. J. L. Boehm, St. Louis.
26 Relation of the Physician to the Dentist. J. Miller, Maryville.

19. **Pyelocystitis.**—Six cases are reported by Broderick, five of them occurring in females, in each of which there was a preceding history of ileocolitis within six months of the urinary infection. In only one of the cases was there a rigor; it lasted twenty minutes. There was slight vulvitis in two cases. Broderick adopted Thompson's method of treatment. It consists in the administration of potassium citrate (from 48 to 60 gr., increasing to from 120 to 180 gr. in the twenty-four hours). There will be noticed a rather marked change as the urine becomes alkaline. Hexamethylenamin, in doses of from 3 to 5 grains, is frequently administered. Broderick combines the two methods, giving the citrate in increasing doses, every two hours, until the urine is alkaline. He then gives hexamethylenamin, in doses of from 3 to 5 grains, three times daily. The remaining treatment is that of any infection of the urinary tract.

21. **Teaching Medicine Aright.**—The experiences and the sober thought of thirty-three years—thirty of them (from 25 to 55 years of age) spent as dean or professor or president in three universities, each with a medical department, are laid bare by Jesse. He says that people need not have much knowledge of anatomy or physiology to understand that to learn medicine aright one must have considerable previous training; nor is it necessary to know the length of the alimentary canal to see that professors who spend most of their time in private practice, devoting only spare time to teaching, cannot give the best instruction. If any professional school aims at excellence, it should admit no students that have not had at least four years of good high school training and two years more in a college. In preparation for medicine these two years should be devoted to general chemistry, physics, zoology, botany, French, German and English. Moreover, no school can now give good instruction in medicine unless it has a library, a museum and a number of laboratories, all well-equipped, and each occupying several rooms. How many laboratories are indispensable? The most modest estimate would surely include (1) anatomy, (2) physiology, (3) physiologic chemistry, (4) bacteriology and pathology, (5) pharmacology and materia medica. The equipment of these laboratories is expensive and each must be in charge of a professor who gives all his time to teaching and research. Moreover, he must have one or more paid assistants, according to the number of students. Large income from endowments or other sources is absolutely necessary; fees alone will not pay the bills. Work in these laboratories should occupy the whole time of every student in the first eighteen months of his course.

The last two years (eighteen months) of the four years' course (thirty-six months) are given, in good institutions, to preventive and curative medicine—clinics, so-called. For this instruction there must be a sufficient hospital, a dispensary, a number of laboratories, clinical teachers and, in Jesse's opinion, much revision of modern methods in America. As to whether the clinical teachers should have a private practice, Jesse states that no man can meet the demands of a large private practice and at the same time give the best instruction in any professional school. Success in practicing a profession comes rather late in life for a man to pick up skill in teaching, and attainment in the technic of an art does not of itself bring ability to instruct others therein. Every medical school should have its principal chairs for clinics filled by men who devote their entire time to teaching and research—men who are not for hire by individuals. They should receive adequate

salaries, say from $3,000 to $7,500 a year, according to the value of the man and the costliness of the living in the locality. They should practice in the college hospital of course, but the fees, if there be any, should go to the institution. The hospital, furthermore, should be absolutely under the control of the college. Jesse considers that at least these five cairs, filled in this way, are necessary: (1) surgery, (2) theory and practice of medicine, (3) gynecology, (4) therapeutics and (5) eye, ear, nose and throat surgery.

Revision is needed also in the management of college hospitals. They should accept only, or chiefly, at least, carefully selected patients useful for clinic or research. Only in this way can the best material be obtained for illustration in teaching and for discovery through research. Another false notion, in Jesse's opinion, is that the larger the number of cases the better the clinics, even for undergraduates. Vast clinics and various cases are not necessary for the undergraduate, or even good for him; but rather clinics graded and selected. The undergraduate might spend his summer vacations in larger hospitals, as young engineers spend theirs in field or mine or factory. Moreover, in every state university, at least, the hospital ought to be practically free. In this way it can be made far better, both for teaching and for research.

Another fundamental error found everywhere, he says, is that good clinics are obtainable only in large cities. This notion is far wide of the truth. A hospital of 150 beds, by carefully selecting its patients, can give the best instruction for undergraduates in reasonable number. Every state university in a small town, with a hospital of 150 beds, by accepting without charge cases curable, or incurable, but interesting for illustration or research or both, can have all its beds regularly occupied. It has only to support one good traveling lecturer on hygiene—personal, household and municipal—and to employ one collector of cases in every large city of the state. The collectors (who would not give all their time to this work) might be obtained for $500 a piece annually, and the lecturer for $3,000 or $3,500 with (say) $1,500 more for traveling expenses—about $5,000 a year. What would be the results? The lectures, all free, would illuminate the people and thus promote public health; the physicians of every locality visited might be brought into hearty cooperation with the state university and thus serve as collectors of patients. Jesse points out that state universities, nearly all in small towns, have a rich opportunity through their medical departments, to raise to right notions on this subject the people about them, if only they will go boldly forward toward traveling lecturers, free campus hospitals, selected clinics, investigations into the causes of diseases and right ways of preventing and of ejecting them. Their chief aim should be preventive medicine.

Journal of the South Carolina Medical Association, Charleston

March

27 Cancer of the Face. A. E. Baker, Charleston.
28 Cancer. LeG. Guerry, Columbia.
29 A Plea for the Intravenous Method of Administering Salvarsan. C. W. Barron, Columbia.
30 A Plea for the More Rational and More Energetic Care of the Insane. J. H. McIntosh, Columbia.

Bulletin of the American Academy of Medicine, Easton, Pa.

April

31 *The Hospital and the Young Physician. W. E. Darnall, Atlantic City, N. J.
32 The Economic Influence of the Hospital as Shown on the Profession. W. F. Waugh, Chicago.
33 *Hospital's Recompense to the Staff. T. D. Davis, Pittsburg, Pa.
34 *The Economic Influence of Hospital Administration on the Medical Profession. A. Vander Veer, Albany, N. Y.
35 *Influence of Hospitals on Their Respective Communities. P. V. Eisenberg, Norristown, Pa.

31. Hospital and the Young Physician.—Speaking of the value of hospital training to the recent graduate, Darnall says that it brings him in intimate contact with the best of the profession, enabling him to be started along right paths. The ability to apply practically what he has learned is developed within him, besides a systematic way of doing things, and he learns that not all of medical lore is to be found in printed books or prosy lectures; he sees something of the personal relation between physician and patient, which, sociologically, is a most important thing. If afterward he acquires a position in some hospital it will stimulate him to put forth his best efforts in scientific attainment. If he has ability along any certain line it will give him the opportunity to demonstrate it. The hospital becomes for the young man a finishing school in which the mind is trained to accurate methods and correct reasoning. The daily habit of thoroughness, diagnostic accuracy and the ability to go straight to the point, laying aside the non-essential and unimportant, after a time become habitual. His work is all charted, and is an open book. He must submit to the criticism not only of men of older and richer experience, but also of the younger men with newer methods and even the interns themselves fresh from the laboratories and the schools. It behooves him, therefore, that his work should be of the highest grade and the pride of his reputation cannot afford that it be otherwise. His position demands that he should stand for all that is best and most scientific in medicine. This critical fire to which he is subjected, however, brings out whatever qualities he has and stimulates him to give the best that is within him. The greatest good the hospital does in any community is not so much what it does for the individual as the good it does in sending out men trained to the scientific habit of mind, and whose influence and authority as leaders is reflected in the general diffusion of sanitary knowledge in the community.

33. Hospital's Recompense to the Staff.—In Davis' opinion, the indirect compensation to a doctor on a hospital staff has been greatly exaggerated. If the same amount of time spent in hospital work were spent in study and investigation, and attention to one's office and practice, he thinks that much more benefit would ensue. He says that it is only the small hospitals and some church institutions that do not now pay their physicians for attending patients who occupy private rooms. Of course, the amount of these fees varies much, but it is becoming more and more a recognized principle that the physician laborer is worthy of his hire.

Davis asks whether a hospital patient who is able to pay should not have the choice of his medical attendant, and, also, should hospitals receiving state aid distribute their favors to only a few physicians, or should all have an equal chance? He believes that the answer to these two questions will lead, sooner or later, to the establishing of two kinds of hospitals, the first, a purely eleemosynary institution where none will be treated except those who are unable to pay, and its staff will consist of men who are paid a just salary by the management for their services, in the same manner as hospitals for the insane pay their physicians now. The other kind will be, as it were, invalid hotels, open only to those who will pay according to their accommodations. Such an institution would have no staff, but would be at the service of all reputable physicians. The medical attendants would arrange for their compensation with their patients, just as they would do in private practice. The hospital would make such charges as the manager should see fit for rooms, operating rooms, nurses, etc. Such an institution could restrict its patients to special diseases, or have different departments. It could have private operating rooms to lease to special surgeons. It would supply nurses and such conveniences as a hospital should offer, but private nurses could be employed by any physician. If these two institutions should be housed in one building, the method of paying the medical men would remain exactly the same as if they were in separate buildings. This might be the type for so-called church hospitals. It would prevent hospitals from sailing under the banner of charity, when they are too often simply money-making institutions. It certainly would recompense medical attendants in hospitals, in a much more equitable way than at present. It would also keep from unduly increasing the number and capacity of hospitals and establish them more firmly on a business basis. In many cities the hospital accommodations are very much larger than are required and the expense of maintenance is urged as a reason for not giving proper recompense to the staff.

34. Economic Influence of Hospital Administration on the Medical Profession.—The points which Vander Veer brings out are summarized as follows:

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1. Contributions for the construction of the general hospital to be received from those who are disposed to give for such a charitable purpose, thus becoming a partner with the physician in caring for patients who cannot pay for services in their own homes.
2. The care of such contributions, and the organization of the hospital to rest in a board of governors, or trustees, there being a representation on said board from the medical staff of the hospital, the object of this being a close community of interest, at their meetings, and for the discussion of subjects in which they are mutually interested.
3. Appointments on the medical and surgical staff to be made on the recommendation of the staff proper, to be confirmed or rejected by the board of governors.
4. The fee for care of patients in the semiprivate wards or private rooms to be left entirely with the attending physician or surgeon in like manner as though the attention were given in their own homes, hotels or boarding-houses.
5. The semiprivate wards, too, offer an opportunity for the younger members of the medical profession to care for a larger number of patients, when brought to the institution and who are unable to pay for services, than they could elsewhere.
6. Encouragement for every patient who can do so to pay for his board in the public or semiprivate wards, knowing they will receive the attention of the staff of the hospital, or, as is the case in many instances, of the physician or surgeon whom they themselves may select.
7. An opportunity for the public to give to the general hospital such sums as they may feel disposed for making up the deficit that so often occurs in the care of patients who pay all they can and yet are not able to meet the full charge for their expenses. In this manner the self-respect of the patient and friends is maintained, although they still require a little additional aid.
8. A most excellent method for the city to care for its sick and injured and a great protection to the taxpayers.
9. The endowment fund offers an opportunity for the benevolently inclined to place such gifts as he or she may feel disposed to give under the control of an institution that is to be lasting, and where only the interest is to be employed for the annual expenses. Few institutions in this country have endowments sufficiently large whereby the interest will maintain all expenses, and where such do exist only strictly charity cases should be admitted.

35. **Hospitals and Their Respective Communities.**—Eisenberg points out that the influence of a hospital on its surrounding community is beneficial in the broadest sense.

1. The presence of a hospital in any community furnishes prompt attention in all cases of accident or disease, especially to grave and apparently fatal ones, that might otherwise be jeopardized by transmission to some more remote point.
2. The nearness of a hospital arouses more interest and sympathy in its administration and for those cared for in its wards. Especially is this the case when those on the board of management are selected from the citizens of the immediate community.
3. The proximity of a hospital with its continual needs of assistance appeals to the benevolent heart of a community and stimulates not only giving but benevolent work for its support.
4. The location of a hospital in any community wherein its presence has created benevolent interest accomplishes much toward effacing the hard-and-fast social and sectarian lines by unifying sentiment in one common purpose.
5. In all populous centers wherein a sufficient number of physicians and surgeons are found willing to support a hospital by their gratuitous services such association with the institution is highly beneficial to that community, because of a better feeling that is thus promoted among the medical staff of the institution.
6. The medical staff of such hospital, because of the accumulation of clinical material of great value, is being constantly trained and educated for better work in the homes of their private patients and, therefore, indirectly the community itself is benefited.
7. The great advance within the past twenty-five years in methods of prevention of disease and of the necessity of more scientific care of the sick and injured has rendered a school for training nurses an essential adjunct to a well managed hospital, therefore such institution, in preparing and furnishing trained nurses for service among the sick in their homes, confers a great benefit on a community.

American Journal of Urology, New York

March

36 Salvarsan in Syphilis. E. Tomasczewski, Berlin.
37 Normal and Pathologic Posterior Urethra and Neck of the Bladder. L. Buerger, New York.

Journal of Ophthalmology and Oto-Laryngology, Chicago

April

38 Management and Treatment of Trachoma Among Indians. W. H. Harrison and D. W. White, U. S. Indian Service.
39 Inter-Relationship Between the Eyes and Nose. J. S. Weaver, Kansas City, Mo.

Chicago Medical Recorder

April

40 *Cystoscopic Findings in Early Tabes Dorsalis. I. S. Koll, Chicago.
41 The Visiting Nurse in the Municipality. W. A. Evans, Chicago.
42 Perforating Gastric Ulcer. H. F. Lewis, Chicago.
43 *Legal Rights and Liabilities of Physicians. J. E. Kehoe, Chicago.
44 *Neuralgia of the Larynx. H. Kahn, Chicago.
45 Scarlatina—Its Prevention and Treatment to Avoid Complications. G. W. Reis, Chicago.

40. **Cystoscopic Findings in Tabes Dorsalis.**—Lateral trabeculæ formation, rigidity of the ureteral orifices and hypertrophy of the interureteric ligament, according to Koll, compose the three important points which should lead to a further investigation directed toward changes in the spinal cord. Symptoms referable to the urinary tract should call for a cystoscopic examination. The bladder picture which is found, *in toto*, differs from any other seen through the cystoscope. The most striking changes are found at the ureteral orifices which, instead of showing the rhythmical, uniform, sphincter-like action with each extrusion, allow the urine to flow out without any evidence of a muscular contraction. To this condition, which he has been unable to find described anywhere, Koll has given the name ureteral-orifice rigidity. In some of the cases this rigidity may not be complete, and thus closely resemble the rigidity of the sluggishly acting pupil. There is a more or less marked hypertrophy of the interureteric ligament manifested by increased vascularization and distention of the arteries; the ridge between the two orifices is distinctly higher and stands out well above the remainder of the mucosa of the bas fond.

A third point to make up the diagnostic triad is the typical trabeculization, or the *balken* of the Germans. This differs from the picture given by an overworked bladder due to obstruction by showing the trabeculæ only on the lateral walls of the bas fond, and apparently continuous with the interureteric ligament at either end. The trabeculæ, too, are finer and more nearly resemble the papillary muscles of the heart. In no case in the class under consideration did Koll see any trabeculæ in the median line, in the fundus or extending high up on the lateral vesical walls.

43. This article appeared in THE JOURNAL, April 22, p. 1215.

44. **Neuralgia of the Larynx.**—Kahn reports five cases of non-ulcerative laryngitis dolorosa. He describes laryngeal neuralgia as being a painful non-ulcerative disease of the larynx, characterized clinically by more or less intermittent or constant pain, painful areas, dyspnea, dysphagia, disinclination to talk and fear of approaching death.

Lancet-Clinic, Cincinnati

April 22

46 *Roentgen-Ray Therapy of Enlarged Thymus. S. Lange, Cincinnati.
47 Treatment of Disease. I. O. Allen, Richmond, Ind.
48 The Reason and Purpose of the American Society of Medical Sociology. W. J. Robinson, New York.

46. Abstracted in THE JOURNAL, Oct. 29, 1910, p. 1583.

Vermont Medical Monthly, Burlington

April

49 Surgical Treatment of Empyema Without Complicating Apparatus. S. Lloyd, New York.
50 Anaphylaxis. G. S. Graham, Hanover, N. H.
51 Vaginofixation of the Retroverted Uterus in the Cure of Cystocele in Parous Women. C. W. Strobell, Rutland.

Surgery, Gynecology and Obstetrics, Chicago

April

52 The Operative and Specific Treatment of Renal and Vesical Tuberculosis. H. Kümmell, Hamburg-Eppendorf, Germany.
53 Tuberculosis of the Kidney and Ureter. A. D. Bevan, Chicago.
54 Gonococcus Infection of the Kidney. P. J. Nixon, Baltimore.
55 Tuberculosis of the Tubes, Ovaries and Bladder. G. Kolischer, Chicago.
56 *Value of Chromo-Ureteroscopy in Functional Kidney Diagnosis. B. A. Thomas, Philadelphia.
57 Malignant Papillary Adenoma of the Kidney. J. S. Eisenstaedt, Chicago.
58 Congenital Epulides (Odontoblastomata). L. G. Kaempfer, New York.
59 Intermittent Hydrarthrosis. V. C. David, Chicago.
60 The Radiograph Shadow and the Cystoscope. W. F. Braasch, Rochester, Minn.
61 *Ventrosuspension by the Round Ligaments for Backward and Downward Displacement of the Uterus. H. N. Vineberg, New York.
62 *The Closure of the Abdominal Incision. S. E. Tracy, Philadelphia.
63 Acute Postoperative Dilatation of the Stomach Following Gastrojejunostomy. M. R. Barker, Chicago.
64 Treatment of Eclampsia. L. F. Watson, Oklahoma City, Okla.

56. **Chromo-Ureteroscopy.**—Conclusions as to the functional sufficiency or insufficiency of a kidney, based merely on the onset of the elimination of indigocarmin, Thomas says, may be erroneous. The intensity of the color reaction must also receive serious consideration. Therefore, the first law of the chromo-ureteroscopist is to obtain and maintain an absolutely clear fluid content in the bladder. The second law is to have a sufficiently brilliant illumination. If these two conditions are not secured, he will frequently fail to observe the earliest

onset of the elimination of the indigo, particularly if it is a light blue coloration and merely oozes from the ureteral orifices into the bladder, instead of exhibiting the normal spurt. The first law can be best fulfilled by prolonged irrigation, if indicated, and the employment of an evacuation cystoscope, so that the bladder may be emptied quickly and refilled when necessary. The second law is not so difficult, requiring simply care in the selection of a good cystoscope and the testing of the lamp before introduction into the bladder.

Chromo-ureteroscopy based on the employment of indigocarmin is regarded by Thomas as the most valuable single test for renal sufficiency or insufficiency. The test is said to be particularly applicable for surgical affections of the kidneys and ureters and almost invariably suffices to establish the diagnosis, if, when the indication arises, it be supplemented by ureteral catheterization. It is of no value in movable kidney in the absence of a ureteral kink or hydronephrosis, pyelitis, early tuberculous and certain other forms of nephritis and small tumors not involving a majority of the parenchyma. It is of value in the differential diagnosis of hemorrhagic and chronic interstitial nephritis from other types of the disease. Supplemented by ureteral catheterization, and the Roentgen ray, it will serve to diagnose practically every case of renal and ureteral calculus. In hydronephrosis, pyonephrosis, pyelonephritis and chronic tuberculosis of the kidney involving approximately one-third of the parenchyma, chromo-ureteroscopy is of exceptional merit. In simple hypertrophy or carcinoma of the prostate, causing chronic retention of the urine, the indigocarmin test promises to be of value in the differentiation of operable and non-operable cases.

Chromo-ureteroscopy is also of great value in the differential diagnosis of obscure abdominal tumors, also in facilitating difficult ureteral catheterization. Indigocarmin is eliminated from normal kidneys as a dark blue in from 4½ to 20 minutes; as a light blue, not later than 15 minutes. In 86.7 per cent. of normal kidneys it appears either as dark or light blue in from 4½ to 15 minutes. If the indigo does not appear at the expiration of from 15 to 20 minutes, it is evidence of serious insufficiency of the renal function. If the elimination of the dye does not occur at all, the kidney or ureter is gravely diseased. The intensity of the color reaction (dark blue or light blue) depends on the concentration of the urine and the individual secretory power of the organ. A surgically diseased kidney eliminates the dye less intensely than its normal sister organ, or not at all. The test is very simple and by alternate observation of the two ureteral orifices, differences between the two kidneys are readily and speedily noted.

61. **Ventrosuspension in Displacement of Uterus.**—In Vineberg's method, four sutures are used to suspend the uterus by means of the tubes, two on either side. One suture passes around the tube 4 cm. from the uterus, the other at its insertion into the uterus. The sutures pass through the rectus muscle and fascia and are tied on the fascia. The wound is closed in the usual manner.

62. **The Closure of the Abdominal Incision.**—Overlapping of the cut edges of the rectus fascia is the end aimed at by Tracy. The peritoneum is sutured with catgut, and the same suture is used to whip together the muscle. On the right side of the wound, the fascia is separated back from the muscle, for from 1 to 3 cm.; likewise on the left side. Tension sutures are then introduced through the skin about 3 cm. from the edge of the wound, passing through the fat and the fascia about 1 cm. from the edge, then in and out through the fascia on the left side from 1 cm. to 3 cm. from the edge, and back through the fascia on the right side, then out through the fat and skin on the left side. The sutures are placed from 4 to 5 cm. apart. Next the edge of the overlapping fascia is whipped down with chromic catgut, and the skin sutured with a buttonhole stitch. If the ends of the tension sutures are drawn taut, the fascia will overlap, and the whipping down of the edge will be facilitated. Gauze saturated with 70 per cent. alcohol is placed over the wound and the tension sutures are tied over the gauze. The tension sutures are removed in from ten to fourteen days.

In patients in whom there is a wide separation of the recti muscles and marked relaxation of the abdominal wall, the fascia is overlapped to the extent the recti muscles are separated. In cases of marked relaxation, the recti muscles are dissected out and sutured from an inch above the umbilicus to the pubic bone. It is not considered advisable to constrict the upper abdomen as such a procedure has a tendency to increase the visceroptosis, which is usually present. If the peritoneal cavity is opened when separating tissues about the umbilicus, the peritoneum is sutured transversely as there is less tension and the approximation is better. After the recti muscles are sutured, the edge of the fascia on the left side, which is slid under the fascia on the right side, to the extent the muscles were retracted, is anchored with mattress sutures of chromic gut, and the edge of the fascia from the right side is sutured in the usual way. In order to make a good approximation and to avoid any infolding of the fascia at the upper end of the wound, this fascia on the right side is cut transversely, and the vertical incision carried slightly upward, and to the left. The upper segment (above the transverse cut) is then slid under and the lower segment over the fascia on the left side. The free edge of the fascia is then sutured. When it is necessary to leave one end of the wound open for drainage, the same technic is employed, except that no gauze is interposed between the skin and the tension sutures. By employing this method the separation of the fascia in the part of the wound not closed is less, and the abdominal wall is stronger than if closed by through-and-through sutures; dead spaces are eliminated; the fascia is overlapped and approximated accurately and remains overlapped even if the catgut is absorbed in a few days. No dead space is left in the fat and the necessity of suturing this layer is eliminated. In cases in which there is an excess of serum or slight oozing in the skin or fat immediately after the operation, the pressure from the tension sutures tied over the gauze will force the serum or blood through the skin incision, where it will be taken up by the gauze. If primary union of the wound takes place, it is practically impossible for a hernia to follow, and if the technic is proper, suppuration will seldom result.

Northwest Medicine, Seattle, Wash.

April

65 Neurasthenia Gastrica, or the Nervous Dyspepsia of Leube. A. A. Robinson, Ogden, Utah.
66 The Principles of Chemotherapy, and the Relation of the Wassermann Reaction to Syphilis. R. W. Matson, Portland, Ore.
67 Laboratory Methods in Diagnosis of Syphilis. C. Snow, Salt Lake City, Utah.
68 Salvarsan, Its Place in Medicine To-Day and in the Future. G. S. Peterkin, Seattle, Wash.
69 Significance of Jaundice in Gall-Stone Disease. F. Hinman, Spokane, Wash.
70 Origin of the Various Constituents Found in Urinary Calculi. G. S. Gordon, Vancouver, B. C.

Therapeutic Gazette, Detroit

April

71 Diseases of the Skin. J. W. Miller, Cincinnati.
72 Results of Gall-Stones. J. A. McGlinn, Philadelphia.
73 Exostoses of the Os Calcis. A. J. Davidson, Philadelphia.
74 Puerperal Infection. E. P. Davis, Philadelphia.
75 *A Modified Vaccine Therapy Based on the Theory of Multiple Infections and Quantitative Reaction. A. F. Schafer, Bakersfield, Cal.

75. **A Modified Vaccine Therapy.**—The vaccines used by Schafer are neither "bacterial vaccines" nor "serums" as ordinarily understood, but are solutions in sterile water (to which approximately 0.5 per cent. phenol has been added) of the soluble substances generated by the organisms when grown in suitable culture media. The product is sterile and contains neither live nor dead bacteria, all organisms having been removed by filtration through porcelain. The "mixed-infection vaccine," which is used in the treatment of infections of any character whatever (except where the diagnosis has been clearly established and the predominating causative organism is known) is made from a large variety of pathogenic bacteria. This is a polyvalent preparation, since the organisms are not confined to any one strain of a given species. Two

hundred patients ill with pneumonia have been treated with the special pneumococcus vaccine. A series of fifty-six patients with lobar pneumonia treated with the special vaccine without a single death included two infants, seven children whose ages varied from two to eleven years, eight adults who were chronic alcoholics (three of whom had delirium tremens), sixteen complicated with measles, three with peritonitis, three with virulent peripheral lesions; two obstetric patients; five with typhoid infection, six with double lobar pneumonia, and fourteen individuals over 60 years of age, one being 92. One hundred and fifty patients with typhoid were treated, and of these four died, two from perforation and one from hemorrhage. The average time from the treatment to recovery was ten days. Good results were obtained in several cases of acute articular rheumatism. Considerable improvement followed the use of tuberculosis vaccine in a series of ten cases exhibiting a variety of tuberculous lesions. In gonorrheal infections the results were such that definite conclusions are unwarrantable.

Journal of the Minnesota State Medical Association and the Northwestern Lancet, Minneapolis

April 15

76 Brain Tumors. H. W. Jones, Minneapolis.
77 Practical Use of Tuberculin in Diagnosis. G. E. Brown, Brainerd.
78 Two Cases of Conservative Amputation. J. H. Rishmiller, Minneapolis.
79 A Plan for the Establishment of Local Routine Epidemiologic Work in Minnesota. H. W. Hill, Minneapolis.
80 Evil Effects of Small Adenoids. C. F. Coulter, Wadena.

Archives of Pediatrics, New York

April

81 Diarrhea in Children, with Especial Reference to Pods of Cesalpinia Corriaria (Divi-divi) as a Drug, and to Banana Flour and Plantain Meal as a Food. A. E. Vipond, Montreal, Canada.
82 Value of Prophylaxis in the Early Life of the Exceptional Child. S. V. Haas, New York.
83 A Record of the First 500 Cases Cared for at the Nathan Straus Infants' Milk Depots of Washington, D. C. L. Tayler-Jones, Washington, D. C.
84 Malarial Fever in Children. E. G. Wherry, Newark, N. J.
85 Tuberculous Peritonitis in Children, With Report of Cure Following Two Operations in a Dry Non-Exudative Form of the Disease. J. H. Bradshaw, Orange, N. J.
86 Infant Mortality in Summer: How to Conduct a Successful Campaign Against It. A. Stern, Elizabeth, N. J.
87 *Treatment of Typhoid with Special Reference to the Use of Hydrochloric Acid. A. McAlister, Camden, N. J.

87. **Hydrochloric Acid in Typhoid.**—It is McAlister's uniform practice to use the acid in every case just as soon as the alimentary tract has been well prepared for systematic feeding by the use of eliminatives, preferably broken doses of calomel followed by a saline or castor oil. He gives the acid well diluted, in doses ranging from 2 to 15 minims, according to age and the needs of the individual case, three or four times a day. Pepsin may be added when it seems especially indicated, particularly in the very young or very delicate, and the mixture may be made especially palatable by giving it in the form of an artificial gastric juice. This McAlister regards as being the ideal mixture for pediatric use. The treatment calls for water, both for pleasant administration of the acid and to satisfy the thirst it tends to excite. This in itself is a noteworthy advantage in the treatment of this particular febrile condition in which patients almost never, without special and constant urging, imbibe enough water. But the greater value of the acid lies in its effect on gastric digestion and the tone of the digestive processes generally. He urges more extensive use of this treatment.

Ohio State Medical Journal, Columbus

April

88 Treatment of Hip Disease as Based on its Pathologic Mechanics. H. O. Feiss, Cleveland.
89 The Fergus Advancement Operation for Ptosis. E. Lauder, Cleveland.
90 The Facial Expression and Posture of Disease. S. Loving, Columbus.
91 Tracheobronchoscopy. S. Iglauer, Cincinnati.
92 Diagnosis and Treatment of Puerperal Sapremia and Septicemia. F. Fletcher, Columbus.
93 Review of the Theories of Etiology of Cancer. R. L. Bidwell, Toledo.
94 Treatment of Carcinoma and Sarcoma. H. M. Freeman, Toledo.
95 Further Reasons Why a Natural History is Needed in Ohio. O. V. Huffman, Cincinnati.

Medical Record, New York

April 22

96 Present Day Health Activities. W. Wyman, Washington, D. C.
97 Treatment of Epithelioma, Lupus, etc., with Thorium Paste. L. D. Bulkley, New York.
98 Teaching School Hygiene. J. Burnet, Edinburgh, Scotland.
99 *Serotherapy of Pneumonia in Infants and Young Children. E. M. Sill, New York.
100 *Treatment of Diabetes Mellitus, with Table of Carbohydrate Equivalents. H. S. Carter, New York.
101 *Spontaneous Disappearance of Malignant Growths. J. W. Gleitsmann, New York.
102 Diagnosis of Duodenal Ulcer. M. Gross, New York.
103 Reactions to Tuberculin. L. C. Rouglin, Atlanta, Ga.

April 29

104 *Pulmonary Symptoms as Premonitory Signs of Venous Thrombosis. L. A. Conner, New York.
105 Street Sanitation in New York. W. Van V. Hayes, New York.
106 *A Case of Multiple Myeloma with Albumosuria. C. K. Austin, Paris, France.
107 Drugs in Gastric Therapeutics. J. W. Weinstein, New York.
108 Significance of a History of Alcoholic Addiction. T. D. Crothers, Hartford, Conn.
109 Short Talks with My Students and Others: Being Random Suggestions for the Younger Practitioners. R. H. M. Dawbarn, New York.

99. **Serotherapy of Pneumonia in Infants.**—About a year ago Sill became interested in a polyvalent composite serum obtained from diphtheria-immune horses for use in pneumonia. The serum was injected subcutaneously, in doses of 10 c.c., at varying intervals, depending on the symptoms and the effect it had on the patient. In some cases one injection seemed to be sufficient to relieve the symptoms and check the disease, while in others repeated injections of 10 c.c. were given every day or at longer intervals, although not always with favorable results. Sill thinks that, perhaps, in these latter cases, if larger doses had been given or the serum had been injected at more frequent intervals, it might have made a difference and given a more immediately favorable result. In all, twelve patients were treated by means of the serum, eight males and four females. Their ages ranged from 5 months to 3 years; all but two were under 2 years, and three of these were under 1 year. There were three cases of lobar pneumonia and nine cases of bronchopneumonia. Two patients died, one of empyema and one of extensive double pneumonia, marasmus and cardiac failure (mortality 16.6 per cent.). Two other patients besides those who died were not helped by the serum, but the other eight were all more or less improved and in some of the patients the effect of the serum seemed marked. Those patients who received the serum early in the disease seemed to be most benefited by its use.

100. **Treatment of Diabetes Mellitus.**—Carter calls attention to the fact that the only real success comes through a proper dietary regulation, and as the chief symptom, glycosuria, is dependent on the incomplete metabolism of carbohydrates, any plan for efficient treatment must center about the proper training of the organism to reacquire, to some extent, the lost power of properly burning the carbohydrates. In other words, it is the partial re-education of the individual to the proper digestion of starch and the sugars, a power which has been lost through some defect in the physical economy of the secretions, notably the pancreatic internal secretion.

101. **Spontaneous Disappearance of Malignant Growths.**—Attention is directed by Gleitsman to the fact that this phenomenon does occur, and he urges that the subject be made one of more intensive study.

104. **Venous Thrombosis.**—The chief points to which attention is called by Conner are the following: Pulmonary symptoms are, not infrequently, the first indication of a beginning venous thrombosis, preceding often by several days the local evidences of such thrombosis. Such symptoms are the result of the lodgment in branches of the pulmonary artery of emboli derived from the newly formed, friable thrombi in the peripheral veins. These early pulmonary emboli are usually of small size and the symptoms arising from them are frequently slight and transient. The symptoms of pulmonary embolism and infarction by no means always correspond to the classical descriptions of them. One or more of the cardinal symptoms are frequently lacking. This is especially true of hemoptysis, which is often absent entirely, and at other times appears only several days after the onset of the other symptoms. The physical signs are usually either those of a more or less extensive plastic pleurisy or of a small area of

pneumonic consolidation which lasts only for three or four days. Venous phlebitis and thrombosis, in very many instances, begins in the small peripheral veins, especially in those of the calf, where it may exist for some days before the symptoms of thrombosis of the large veins appear. The chances of pulmonary embolism seem to be much greater at the beginning of a venous thrombosis than later on in its course. Some of the obscure chills in typhoid, Conner says, are related to the lodgment of pulmonary emboli. He cites nine cases to illustrate the points made by him.

106. **Case of Multiple Myeloma.**—The disease that carried off Austin's patient was a myeloma, that is to say, a tumor of the bone-marrow, whose point of departure was in the substance of the twelfth dorsal vertebra, which collapsed through total disappearance of its bony substance. There were metastatic nuclei in the neighboring vertebræ, and in the ribs. This myeloma was characterized by the predominance of lymphocytes. The lymphnodes had undergone a form of atrophy, and a radical change of structure such as is sometimes observed in anemia. There were evident traces of old and healed tuberculosis of the lungs. There were likewise traces of former inflammation of the pleuræ and peritoneum, which was no doubt also tuberculous. It was to this inflammation that the renal lesions appeared to have been due. The points in this case that seem to be of particular interest are the following: A long period of preliminary silence, which probably covered the entire winter. The period of increasing pains, lasting three months, ending in a big crisis, and followed by six months of uninterrupted improvement resulting in a condition that the patient considered practically a normal one. The apparently favorable action of the atoxyl treatment; the fact that with a whole vertebra entirely destroyed, and without the slightest artificial support, the patient suffered no inconveniences whatever from this pseudoarthrosis, while at no time were there paralytic symptoms of any sort.

Journal of the Oklahoma State Medical Association, Muskogee

April

110 The Repair of Fracture. J. H. Scott, Shawnee.
111 Antityphoid Vaccination. J. W. Riley, Oklahoma City.
112 Tuberculosis of the Fallopian Tube. C. N. Ballard, Oklahoma City.
113 Duty of the Physician to Himself. L. H. Huffman, Hobart.
114 Electricity and the Nervous System. T. A. Williams, Washington, D. C.
115 Lacerated Cervix-Uteri. J. H. Hansen, Grandfield.
116 Pyloric Obstruction Due to Extrinsic Causes. G. A. Beedle, Kansas City, Mo.

Boston Medical and Surgical Journal

April 27

117 Men, Manners and Medicine. R. M. Green, Boston.
118 *Climatic Treatment of Tuberculosis. G. Hinsdale, Hot Springs, Va.
119 *Common Colds. J. A. Honeij, Boston.
120 Analysis of Forty-six Cases of Prostatectomy. L. Davis, Boston.
121 Pemphigus Chronicus Vulgaris of the Oral Cavity and Larynx. R. A. Coffin, Boston.
122 Acute Toxemia Caused by Infection of the Throat by the Colon Bacillus. C. B. Faunce, Jr., Boston.

118. **Climatic Treatment of Tuberculosis.**—Hinsdale is firm in the belief that for the majority of incipient cases, when the patient can well afford it, life in a selected locality in the west offers the best prospect of cure; but that for eastern patients a period of training in an eastern sanatorium is highly desirable—the first and most important stage in beginning any climatic treatment. He believes that dryness, sunshine and altitude are features of the best climate, but that they decidedly disagree with some patients when presented in extreme doses as in some of our southwestern resorts. Hinsdale agrees with others that given simple pulmonary tuberculosis (not far advanced), somewhat over 60 per cent. of such patients will do better and live longer in the West than they would in the East, supposing every other consideration to be equal; also that nearly 40 per cent. of the total will do better and live longer in the East than in the West, similar conditions prevailing in both places. Of course those comprising this latter 40 per cent. in the East may not do quite so well proportionately as those of the 60 per cent. in the West, but in the East they will be doing the best that they can, and a small majority of the 40 per cent. can be cured under eastern conditions that would probably fail utterly in the West. In other words, conditions other than money, nostalgia, etc., should enter into the question of cases of tuberculosis being treated and remaining West or East. Doubtless every patient who is able to afford it easily should try the West; the first and essential part of the western trial being a period of regulated régime in the East.

119. **Common Colds.**—This is a statistical paper. Honeij details the results of an investigation of the prevalence of common colds and the economic loss due to them, together with a study of the various types of colds, sources of infection, the vocations most affected and other facts of more or less interest and importance.

Virginia Medical Semi-Monthly, Richmond

April 7

123 Diagnosis and Treatment of Tumors of the Breast. J. S. Horsley, Richmond.
124 Late Methods in the Diagnosis and Treatment of Gastric Diseases. J. R. Verbrycke, Jr., Washington, D. C.
125 Hydronephrosis. K. Ruffin and L. Gwathmey, Norfolk, Va.
126 Some Interesting Mastoid Cases. J. R. Winslow, Baltimore.
127 Appendicitis—Review of 130 Operative Cases. W. L. Peple, Richmond.
128 Treatment of Advanced Cases of Appendiciais. J. N. Lewis, Roanoke.

Long Island Medical Journal, Brooklyn, N. Y.

April

129 Status of the Radical Mastoid Operation for Cure of Chronic Suppurative Otitis Media. W. C. Braislin, Brooklyn, N. Y.
130 Salvarsan. J. M. Winfield, Brooklyn, N. Y.
131 Correction of Paralytic Deformities in Young Adults. W. Truslow, Brooklyn, N. Y.
132 Treatment of Movable Kidney. T. B. Spence, Brooklyn, N. Y.
133 Some Pelvic Pathology and Reflexes. R. T. Morris, New York.

Medical Fortnightly, St. Louis

April 10

134 Aphonia. L. D. Brose, Evansville, Ind.
135 Supplying Anatomic Material. G. H. Bogart, Brookville, Ind.
136 Personal Experience with Specific Vaccines. E. E. Clark, Danville, Ill.
137 Important Difference Between the Opsonic Negative Phase and the Clinical Negative Phase in Bacterial Therapy. F. E. Stewart, Philadelphia.

Annals of Ophthalmology, St. Louis

April

138 The Chemistry of Metabolism in its Relation to Eye Disease. S. L. Ziegler, Philadelphia.
139 Relation of Cerebral Decompression to the Relief of the Ocular Manifestations of Increased Intracranial Tension. G. E. de Schweinitz, Philadelphia.
140 Ocular Complications of the Acute Exanthemata. J. M. Griscom, Philadelphia.
141 Vaccine Therapy and Serotherapy in Disease. W. Zentmayer, Philadelphia.
142 Restoration of Contracted Sockets After Enucleation of the Eyeball—Advantages of Thiersch's Skin Graft Over Other Methods of Treatment. V. L. Raia, Providence, R. I.
143 A Modified Pterygium Operation. P. B. Wing, Tacoma, Wash.
144 Ocular Symptoms of Infantile Scurvy. J. H. Dewey, Philadelphia.
145 Elephantiasis of the Eyelids. W. B. Weidler, New York.
146 Papilloma of the Conjunctiva. F. Krauss, Philadelphia.
147 Gumma of the Brain, with Absolute Blindness and Complete Recovery. E. O. Winship, New London, Conn.
148 Vertical Imbalance (Hyperphoria and Hypophoria) and the Value of the Vertical Prism in Ophthalmic Practice. W. Reber, Philadelphia.
149 An Improved Astigmatic Axis Finder. E. B. Coburn, New York.
150 The Scientific Versus Method by Rule, for Converting Cross Cylinders into Compound Lenses. W. C. Langhorst, Aurora, Ill.

FOREIGN

Titles marked with an asterisk (*) are abstracted below. Clinical lectures, single case reports and trials of new drugs and artificial foods are omitted unless of exceptional general interest.

British Medical Journal, London

April 15

1 Arteriosclerosis and the Kidneys (to be continued). Sir C. Allbutt.
2 *Heart Failure. J. Mackenzie.
3 *Surgical Treatment of Chronic Colitis. D. Power.
4 *Vaccines in Acute Mastitis. T. H. C. Benians.
5 *Erythema Nodosum Following Measles. E. P. Joynt.
6 *The Value of Surgical Treatment of Pulmonary Cavities. J. D. Harris.
7 Scopolamin-Morphin Anesthesia in Labor. D. Corbett.
8 Evidence of Recent Severe Illness Afforded by the Nails. N. Flower and Sir S. Wilks.

2. **Heart Failure.**—The point is emphasized by Mackenzie that an individual affected by a heart lesion which diminishes

his working force must live within the limits of his powers. This can only be done by the period of rest being sufficient to restore the exhaustion of the work force. In this way alone will heart failure be avoided, and a reasonable prospect of longevity be attained. Treatment need not be given in the presence of any abnormal conditions unless there is distinct evidence of heart exhaustion. Where there is such evidence, then the treatment, in the first place, must consider the possibility of diminishing the amount of daily effort. From the point of view that heart failure arises because the period of work is so great that the period of rest cannot restore a sufficient amount of work force, the essential principle of treatment becomes self-evident—namely, rest. The success of the treatment depends entirely on the amount of rest the heart has procured. Mackenzie thinks it probable that drugs which have such a potent and beneficial effect on the heart as those of the digitalis group owe their good effects mainly to the amount of rest procured by the slowing of the heart's rate. At all events, in the researches Mackenzie has been carrying on for some years, the patients who have obtained the greatest benefit from digitalis were those in whom the heart's rate was decreased by the digitalis. He has repeatedly seen relapse of patients coincide with an increase in the pulse-rate when the digitalis was diminished or left off.

The vast majority of patients in whom digitalis acts with such marvelous effect in slowing the rate and improving the condition are those affected by auricular fibrillation. Hearts with the normal rhythm are seldom so sensitive to digitalis, and in them there is not the same tendency to slowing of the rate. Mackenzie says that it is a matter of every-day experience to find individuals with a murmur or an irregularity, who for years have been subjected to treatment and made to visit health resorts, for a condition which neither indicates heart failure in the present nor its likelihood in the future. The fact that heart failure did not arise has probably been attributed to the precautionary measures. From this comes the belief in the efficacy of many of the drugs and methods in use to-day. When many of the vaunted remedies are carefully investigated, their uselessness becomes evident. There are many conditions in which rest alone fails to benefit the heart, as when the heart is invaded by a toxin, or rendered irritable from some lesion in the organ itself, or when the ventricle in heart-block contracts so seldom as to endanger life. For these and many other conditions, we are absolutely without any means of meeting the impending and actual danger, and yet we are kept in ignorance of this fact because writers pour forth a stream of remedies for any and every kind of heart trouble. Were we more alive to our own limitations, we should be more industrious in the search for real and valuable remedies.

3. **Chronic Colitis.**—Appendicostomy is favored by Power in these cases of ulcerative colitis. The products of the ulceration are very abundant, and their absorption is one of the most serious dangers of the disease. It is important, therefore, to cleanse the bowel and to keep it free from putrefying products. Drainage through the appendix enables this to be done in the most satisfactory manner. The operation of appendicostomy is not so serious as that required for removal of the appendix during the quiet stage. It is very effective, and the fistula can afterward be closed without trouble; indeed, in some cases the difficulty is to prevent spontaneous closure. On the other hand, Power emphasizes that it must be clearly understood that appendicostomy will not cure ulcerative colitis, and the friends of the patient should have this clearly explained to them at the time of the operation, or they will be disappointed. The object of the operation is to keep the bowel clean and to prevent the absorption of toxic products. The ulcerative process continues until the patient becomes immune either by a natural process or by artificial means. Appendicostomy, therefore, prolongs the life of the patient, and thus gives him a better opportunity to be cured.

In the cases which have come under Power's observation (ten) the first effect of appendicostomy has been a material improvement in the condition of the patient, even in the most advanced cases. The temperature falls, the appetite returns and may remain good permanently. The improvement in the general condition, however, is not maintained in its full extent, and a relapse occurs after a week or two. These relapses are a cause of great anxiety, but, so far as he has seen them, they have only been temporary, and the net result of the operation has been a slow but interrupted progress to recovery after months of illness. Power has tried many different drugs as local applications in these difficult cases of ulcerative colitis. Phenol in all its forms, however disguised, has caused carboluria so often that he has ceased to use it. Bismuth salicylate, perchlorid of mercury, biniodid of mercury and boric acid caused irritation in the earlier stages and were discontinued. Bismuth carbonate (15 grains to 1 pint) and potassium permanganate (1 in 30,000) were some of the drugs which proved most useful and were soothing. In the later stages of the disease irrigation with perchlorid of mercury (1 in 20,000), zinc sulphate (4 drams to 3 pints) and silver nitrate in the strength of 5 to 10 grains to the pint of sterilized water gave the best results when they were used alternately. Ionized irrigations were employed on several occasions, but he could not satisfy himself that there were any marked improvements.

4. **Vaccines in Acute Mastitis.**—Benian cites a considerable number of cases of acute mastitis and chronic suppurating sinuses of the breast in which the vaccine treatment was eminently successful.

5. **Erythema Nodosum Following Measles.**—In 9 out of 300 cases of measles erythema nodosum developed. In most of the cases about ten to fourteen days had elapsed since the first onset of measles before the erythema nodosum made its appearance. In half the cases the first symptom was pain in the joints, followed by the erythema in about twenty-four hours. There was no history of rheumatism or contact with rheumatic fever in any of the cases, and no rheumatic or cardiac lesions were found in any of the patients. The question of sore throat before or at the time of the measles rash was carefully gone into by Joynt, but it was present in one case only. So far as he knows no other case of erythema nodosum has occurred in the sphere from which these cases have been collected. Seven of the cases occurred among the poorer class attending the hospital, and two were private patients in fairly good circumstances.

6. **Surgical Treatment of Pulmonary Cavities.**—Harris reports another case (his second) in which opening a pulmonary cavity and treating it surgically seemed indicated. He regards the procedure as being useful and fairly safe in non-tuberculous cases in which the cavities are but few in number. The result was all that could be desired. This case presented one or two special points of interest. Thus there were no adhesions found strong enough to prevent the lung from retracting from the wound. Neither was there anything to guide the palpating finger to the dilated bronchus. Again, the movements of respiration, so much exaggerated anteriorly as compared to the movements of the ribs posteriorly, repeatedly pulled out the tube from the bronchiectasis, for although the latter was carefully mapped out prior to operating, as soon as air entered the pleura the bronchiectasis was drawn upward and toward the mediastinum. The operation was therefore divided into three stages. When efficient drainage of the bronchiectasis was established, the temperature fell to normal, and remained so with cessation of all sweatings. Lastly, the collapsed lung and injured pleural cavity were subjected to Roentgen rays for twenty minutes on four occasions.

Lancet, London

April 15

9 *Heart Failure. J. Mackenzie.
10 *Indications for and Technic of Cesarean Section. A. Routh.
11 *Nature of the Skeleton Changes in Acromegaly. A. Keith.
12 *A House Epidemic of Typhoid Fever Due to a Carrier of an Atypical B. Typhosus. W. J. Wilson and J. A. Sinton.
13 Three Hundred Cases of General Anesthesia Combined with Narcotics. G. Brown.
14 *Prolapsus Uteri: Ventrofixation. J. O'Conor.
15 Common Forms of Deafness. W. H. Kelson.
16 An Improved Drainage Tube for Suprapubic Cystotomy, Liver Abscess and Abdominal Cysts. L. McGavin.

9. Also published in the *British Medical Journal*, April 15, 1911.

10. Also published in the *Journal of Obstetrics and Gynecology of the British Empire*, February, 1911.

11. **Skeleton Changes in Acromegaly.**—After having examined a considerable number of skulls, Keith concludes that the changes in acromegaly are of the nature of true growth, and are apparently due to the circulation through the body of a substance formed in the pituitary. This substance seems only to sensitize the tissues, the actual cause of their growth being mechanical stimuli arising from muscular action and mechanical movement. The growth changes seen in the acromegalic are of the same nature as those which occur normally in anthropoids and in the Neanderthal race, and both are probably due to a condition of hyperpituitarism.

12. **A House Epidemic of Typhoid.**—A house epidemic consisting of seven cases of typhoid is reported by Wilson and Sinton. The first patient was the mother who had eaten cockles a fortnight before her illness and who became a bacillus-carrier. The infecting bacillus was at first immotile when grown on agar, and was somewhat inagglutinable. The mother gave birth to a healthy full-term child, and her milk was very rich in agglutinins.

14. **Prolapsus Uteri: Ventrofixation.**—As experience has tended to prove that permanent reliance cannot be placed on any method of suturing the fundus, O'Connor adopted the following procedure with, so far, most promising results. The abdomen having been opened by a low central incision, the uterus is drawn forward with the left hand, and a small transverse cut is made at the site of the reflection of the peritoneum on the anterior surface of the uterus (exactly similar to the preliminary peritoneal incision in hysterectomy). With the handle of a knife or with the right index finger, the peritoneum with the bladder is pushed downward and forward, until a space of about an inch square is left on the anterior surface of the cervix. The peritoneum on each side of the exposed area is seized with pressure forceps, and is retracted out of the way, while he passes three strong catgut sutures, about one-third of an inch apart, through the denuded surface of the cervix, deep enough to get a firm grip of the cervical muscular coat. The needles having been removed, he draws the ends out, respectively, on each side through the recti muscles, by the aid of Childe's ligature forceps. Thus the peritoneum is exeluded, and the exposed cervical connective tissue is brought into direct apposition with the recti. Before tying these three fixation sutures, O'Connor always closes the peritoneal layer of the parietal wound by a continuous catgut suture, the first few loops of which he passes also through the uterine peritoneum just above the denuded area, in order that no raw surface may be left for the omentum or the intestine to adhere to. The three cervix-recti sutures are next tied, and the muscles are approximated through the remainder of the incision by another catgut suture, the rectus sheath is similarly closed, and the skin is united by a subcuticular silk thread.

Clinical Journal, London

April 5

17 *Dyspnea in Nephritis and Diabetes Mellitus. N. Tirard.
18 Acute Intussusception. E. S. Bishop.

April 12

19 *A Fatal Case of Acute Suffocative Catarrh of Pneumococcal Origin (Pneumococcus Bronchitis). A Second Case of Pneumococcus Bronchitis (Unilateral) of Long Duration and Not Fatal, with Other Analogous Cases and Remarks. S. West.
20 Mixed Morbid Conditions in the Chest. J. W. Carr.
21 Acute Bronchial Affections in Young Children. T. D. Lester.

17. **Dyspnea in Nephritis and Diabetes.**—Urgent dyspnea, Tirard says, is always of grave import in nephritis and diabetes. In nephritis, when dyspnea is found, one must determine the cause, and to which of these categories of dyspnea the case belongs. It is essential for the purpose of treatment. The treatment should be hot-air baths and purgatives. Diaphoretics may do good in one group, and in another group it may be necessary to withdraw the fluid from the legs, the abdomen and the chest. In yet another group of cases, success may be obtained by stimulants and by expectorants. In diabetes, when dyspnea develops, one must examine the chest very closely for evidence of tuberculosis or other pulmonary trouble, and must also examine the urine closely for evidence of acetone or diacetic acid, remembering that this may be present even when, or particularly when, the sugar has shown signs of diminishing. When the sugar diminishes and dyspnea is worse, it is almost always certain that acetone or oxybutyric acid or diacetic acid will be present. Another practical conclusion is that when this symptom of air-hunger develops in patients who are not known to be diabetic, or who are known not to be diabetic, or when there is marked apathy or drowsiness in patients who are being fed by the rectum, it is advisable to examine for acetone and diacetic acid, and when these substances are present, whether one is dealing with diabetics or non-diabetics, it is always a safe rule to give alkalies and carbohydrates.

19. **Acute Suffocative Catarrh of Pneumococcal Origin.**—West regards the association of bronchitis with pneumonia as being always serious, but the gravity depends on the relation between them. Pneumonia occurring in the course of an ordinary bronchitis is an awkward complication, but not necessarily fatal. If, however, the signs of bronchitis develop in the course of a pneumonia, the result is almost invariably fatal. The meaning of the bronchitis in the two cases is different. In the first it is merely an association of two independent diseases. In the second the bronchitis is a sign of pulmonary failure, the result of the strain thrown on the lungs by the pneumonia; the lungs having done all they could to cope with the pneumonia, but failed, the signs of the failure being those of bronchitis. This is sometimes called secondary congestion of the lung. But the congestion of the lung may be primary. It may be coincident with the onset of pneumonia, and produce very grave symptoms. It may even be associated with hemoptysis, which is sometimes considerable. Yet as the consolidation develops in some part of the lungs, the primary general congestion may subside and the physical signs gradually limit themselves to those of ordinary consolidation. This may be compared to the widespread initial swelling which occurs in the subcutaneous tissue precedent to the development of a boil, and which rapidly disappears as soon as the infection localizes itself. If, when the pneumonia localizes itself, this general congestion still continues, it constitutes a very grave complication. This general congestion, bronchial as well as pulmonary, may also exist independently of any, or of anything but slight, consolidation. It is then a condition of the greatest gravity.

Medical Press and Circular, London

March 29

22 *Rheumatic Manifestations in Childhood. R. O. Moon.
23 Congenital Cystic Kidney. K. E. L. G. Gunn.
24 The Senile Heart: Prognosis and Treatment. J. Hay.
25 Primary Pneumococcus Peritonitis. T. G. Moorhead.
26 A Case of Acute Visceral Syphilis. T. Bushby.

April 12

27 Salvarsan in Syphilis. S. Taylor and R. W. Mackenna.
28 *A Case of Anomalous Cutaneous Eruption. W. K. Wills.
29 Paratyphoid Fever. G. Peacocke.
30 Fractures of the Patella and Their Surgical Treatment. C. B. Lockwood.

22. **Rheumatic Manifestations in Childhood.**—In Moon's opinion, there is one thing more important than all else in the treatment of rheumatism, and that is rest. Thus the rheumatic nervous children should have their school hours reduced, and in particular should not be allowed to work in the evening; in addition, an hour's enforced rest in the middle of the day is often advisable in such cases. But it is above all in the cardiac manifestations that rest is of such sovereign importance; a couple of months or more in bed is none too much when a cardiac lesion has been detected, and when the child first gets up, great caution must be exercised for some months longer. In the present state of knowledge this is far the most important thing to be done in order to save the heart from an entire breakdown of compensation. It is important that these children be warmly clad, but there is no reason why they should not eat the same food as ordinary healthy children. Care should be taken that they are not overworked at school or over-fatigued by too much exercise; any indication of this, such as headache, restlessness at night or general nervousness should be promptly treated by stopping school work, resting at home for two or three weeks, and, perhaps, it may be well to give small doses of arsenic and iron or cod-liver oil and iron, always bearing in mind the insidious attack which rheumatism so often makes on a vital organ.

XUM

28. **An Anomalous Cutaneous Eruption.**—The patient whose case is reported by Wills was a boy, 6 years old, who had had tonsillitis, cervical adenitis and sore throat. The skin eruption followed. The skin over the shoulders became scaly, and this condition spread in a couple of weeks to the whole trunk, and to a lesser extent to the thighs, arms, neck and face, but did not involve the hands, feet or scalp. By the end of the month, while the scaly condition was extending, the parts first involved were showing more inflammatory changes, and a small amount of serous discharge appeared, and the scales were shed, leaving a raw surface. At the end of three weeks, the whole of the trunk had become "raw," the conjunctiva had become involved, the gums and lips were also ulcerated, and the condition of the child most pitiable. The discharge had soon become purulent and offensive, but no local treatment seemed in any way to allay the symptoms. The temperature was of a septic type, but did not run very high. He presented the appearance of a profound toxemia. Cultures were made from the throat lesions, from the nose, eye and the skin lesions, and all were returned "positive Klebs-Loeffler." Almost immediately after injecting diphtheria antitoxin improvement began to set in. The local treatment had comprised boric ointment and zinc and mercury applied on lint.

Annales de Gynécologie et d'Obstétrique, Paris

March, XXXVIII, No. 3, pp. 129-192

31 *Myelitis and Polyneuritis During Toxic Vomiting of Pregnancy. L. Job.
32 Carcinoma of the Uterus. G. Rossier.
33 Superheated Air in Treatment of Gangrene, etc. (Quelques résultats de l'aéro-thermo-thérapie.) R. Dupont.
34 Transient Retention of Nitrogen During Protracted Delivery. A. Couvelaire.

31. **Polyneuritis During Pregnancy.**—Job has compiled sixteen cases of myelitis or polyneuritis occurring in the course of toxic vomiting in pregnant women. In each case in which the pulse is recorded the rate had been over 100 before the signs of paralysis developed, confirming the necessity for active measures whenever the pulse runs over 100 in the vomiting of pregnancy. Five of the women died; six were delivered at term but most were left with severe functional disturbances. In five cases the gravity of the symptoms led to early interruption of the pregnancy and the outcome was by far the most favorable in this group. In a case reported in detail, abortion was not induced until nearly two months after the first symptoms and the patient did not long survive. The auto-intoxication seemed to follow a regular course in the entire sixteen cases, affecting first the vomiting center, then the cardiac center and, finally, the peripheral nerves. The nervous symptoms may continue to develop after all the gastric symptoms have subsided and, once installed, they show scarcely any tendency to subside so long as the pregnancy persists. The prognosis is better with abortion or premature delivery induced in time.

Annales des Maladies des Org. Génito-urinaires, Paris

March 15, XXIX, No. 6, pp. 481-576

35 *Calculus in Kidney or Ureter in Children. (De la lithiase rénale et urétérale chez l'enfant.) M. Rafin.
36 Action of Colon Bacillus on the Kidney. (Action du "Bacterium coli" sur le rein.) F. Cuturi.
37 *Technic for High Incision of the Bladder. (Taille hypogastrique.) O. Pasteau.

35. **Calculus in Kidney or Ureter in Children.**—Rafin has been able to collect thirty-nine cases of this kind in children in which the stones were found in the kidney or ureter at an operation or necropsy. He has also operated in two cases. The symptomatology seems to be the same for children as for adults, but radioscopy is even more instructive with children. The knowledge that there are stones located at different points through the urinary apparatus is important, as the gravity of the condition is enhanced by the multiplicity of the localizations. Nephrotomy seems to be even less injurious in children than in adults. The immediate results were good in all the cases after the operation; the four fatalities were all in cases with severe infection and multiple concrements. The end-results are known in only very few of the children. It is more than probable, he thinks, that in many cases of urinary calculi in adults, the concrements had commenced to form in childhood, as in a case cited in which a stone, weighing 25 gm., was removed from the ureter of a girl of 16, who for ten years had had occasional kidney colics and hematuria. Five of the thirty-nine children were under 5, eighteen between 5 and 10, and twelve between 10 and 15. The lithiasis was exclusively on the right side in twenty-one cases and bilateral in six of the thirty-five in which the localization is mentioned; the concrements were in the right kidney alone in seven, right ureter alone in eleven, both kidney and ureter in two, while both were involved on both sides in three cases and in another bilateral case the bladder was also involved, as also in another case exclusively on the right side. In one of Nicolich's cases, radioscopy showed a stone in the right kidney, three in the left, and five in the left ureter. The latter were spontaneously expelled and the kidney stones removed by operation, after which radioscopy showed the entire urinary apparatus clear of concretions. In conclusion Rafin reiterates the comparative harmlessness of operations on the urinary apparatus in children and the necessity for keeping watch over the little patients so as to institute medical measures to ensure a permanent cure of the infectious process; it is liable to persist in a latent form unless diligently sought and eradicated.

37. **Technic for Suprapubic Incision.**—Pasteau stands on the left side of the patient and raises the pelvis before opening up the prevesical space. Then, when ready to incise the bladder, he has the pelvis raised still higher, as much as 35 or 40 degrees, not lowering it until the bladder has been sutured again. He distends the bladder with air and makes the incision in a part of the wall lifted up by two catgut threads run into the wall on each side of the median line, these threads aiding later in the suture.

Bulletin de l'Académie de Médecine, Paris

March 28, LXXV, No. 13, pp. 415-462

38 Sixteen Years of Antitetanus Serotherapy. Vaillard.
39 Preliminary Medical Education in France. (Nos écoles préparatoires.) Motais.
40 *Syphilitic Jaundice. (Ictère syphilitique—Ictère hémolytique ou sanguin.) E. Gaucher and Giroux.

40. **Syphilitic Jaundice.**—Gaucher and Giroux report two additional cases of syphilitic jaundice accompanying the secondary manifestations and developing with the clinical and blood findings of acquired hemolytic icterus. There was no general reaction nor signs of biliary intoxication, pruritus or bradycardia. The destruction of the red corpuscles was due to their abnormal fragility in one case and in the other to the presence of hemolysins in the circulating blood. Both types differ entirely from catarrhal jaundice which is an ordinary icterus with no syphilitic features.

Journal de Chirurgie, Paris

February, VI, No. 2, pp. 137-248

41 *Treatment of Extensive Phlegmon of the Synovial Sheaths in the Hand. (Remarques sur le traitement des phlegmons graves des gaines synoviales de la main.) P. Lecène.

41. **Extensive Phlegmon of the Synovial Sheaths in the Hand.**—Lecène has never obtained any benefit from Bier's method of inducing hyperemia in these serious cases, and quotes Forsell's actually disastrous experience with it. He adds that even in Germany this method is comparatively little used now in this class of cases. The best results are obtained, he asserts, by a long incision following the tendon sheath and extending the whole length of the infected segment. According to its location, the incision starting above the wrist was carried to the tip of the thumb, of the little finger or the second finger in the four cases reported. The grave lesion healed without impairment of the functioning of the wrist in each case, and the fingers regained normal functioning in all except two of his patients, in whom the little finger was left stiff, the tendon in this finger having been totally destroyed by the suppurative process. His patients were two men and two women, all in the forties.

Lyon Médical, Lyons

March 26, CXVI, No. 13, pp. 553-592

42 Growth of the Long Bones. (Note sur la croissance des os longs.) Galloid and Latarget.

Presse Médicale, Paris

April 1, XIX, No. 26, pp. 253-268

43 Inaugural Lecture in Neurology. Dejerine.
44 Abdominal Cavity from the Surgical Standpoint. H. Hartmann.

Semaine Médicale, Paris

April 12, XXXI, No. 15, pp. 169-180

45 *Rupture and Perforation of Pyosalpinx. F. Lejars.

45. **Rupture and Perforation of Pyosalpinx.**—Lejars reports another case of this kind to supplement five others he has previously reported. He also reviews what Bonney and others have published on the subject, emphasizing the necessity for bearing in mind the possibility of rupture of a pyosalpinx when confronted with menacing peritonitis of unknown origin. The history of the case generally shows some acute flare-up of an infectious process just before and a slight contusion afterward inducing the rupture or perforation. The pyosalpinx may also rupture during delivery or measures to induce abortion. Chevassu recently reported a case of this kind; a woman introduced a long bone cannula supposedly into the uterus and during the night abdominal symptoms developed with fever; pulse was weak and 130, and the abdomen was found flooded with pus traced to one tube containing several small interstitial abscesses. The tube was removed, as the condition of the patient did not permit hysterectomy. She died in less than five days. Mary has encountered three similar cases in lying-in women. All succumbed and one tube was found perforated. Puerperal infection was the presumptive diagnosis and the flaring up of a puerperal process may lead to rupture of a hitherto latent pus tube. Galliard has reported a case in which a woman convalescing from typhoid suddenly developed severe colic, vomiting and tympanites, high fever and pulse of 160. When the abdomen was opened no perforation could be found in the intestines but the right tube was swollen and perforated and it was excised; the patient rapidly recovered. Typhoid bacilli were cultivated from the pus in the excised tube. Lejars found streptococci exclusively in the pus in one case of diffuse peritonitis from rupture of a left pyosalpinx, and death speedily followed. Latzko and Cotte have each reported a case of ruptured abscess in an ovary. Lejars has also encountered two cases in which the tube had perforated and had become gangrenous, the conditions resembling exactly those in a gangrenous appendix. The peritonitis following perforation of a pus tube is, as a rule, unusually grave and rapidly progressive; the pains are localized in the pelvis, and are severe from the first; the findings with vaginal palpation may give the clue to the suppurating focus in the uterine adnexa. The condition is frequently mistaken for appendicitis or a ruptured tubal pregnancy. Differentiation is important on account of the necessity for prompt operation without temporizing; removal of the diseased tube and possibly the uterus with the adnexa is the safest course.

Berliner klinische Wochenschrift

April 10, XLVIII, No. 15, pp. 653-696

46 Experimental Syphilis in Rabbit. (Experimentelle Impfsyphilis der Kaninchen.) P. Uhlenhuth and P. Mulzer.
47 Transportable Apparatus for Inhalation of Radium Emanations. A. Bickel and W. Engelmann.
48 Excision of a Liver Cavernous Angioma. (Fall von Exstirpation eines Lebercavernoms.) J. Israel.
49 Development of a Sarcoma on Floor of a Lupus Carcinoma. E. Senger.
50 *Diagnostic Importance of Laryngeal Paralysis. (Kehlkopflähmung.) H. Grabower.
51 *Control of Strychnin Poisoning by Intratracheal Insufflation and Ether. T. S. Githens and S. J. Meltzer (New York).
52 *Improved Method of Artificial Respiration. G. Meyer.
53 *Flat-Foot Disturbances and Deforming Arthritis. P. Ewald.
54 Anaphylaxis of Pregnancy. (Die Ueberempfindlichkeitserscheinungen in der Schwangerschaft.) A. Hirschberg.

50. **Diagnostic Importance of Paralysis of the Larynx.**—Grabower insists that examination of the larynx is as important as that of the fundus of the eye in all nervous affections, and should be a routine procedure. Paralytic conditions in the larynx may exist without causing appreciable symptoms; they may even be the earliest sign of tabes dorsalis and possibly permit effectual treatment before irreparable lesions are installed. The laryngeal disturbance with multiple sclerosis may be merely a tremor of the vocal cords or a twitching movement, but laryngeal symptoms deserve to rank as a diagnostic measure with nystagmus and temporary blanching of the papilla. Paralysis in the larynx is, further, characteristic of syringomyelia, especially unilateral recurrent paralysis. Grabower's research has shown that the posterior crico-arytenoid muscle has only 230 nerve fibers in comparison with the 680 fibers of the inner portion of the thyro-arytenoid muscle; it is thus less resistant and becomes paralyzed more readily. As tuberculosis frequently begins in the bronchial glands and these compress the recurrent laryngeal nerve, paralysis of the posterior crico-arytenoid muscle controlling the vocal cords may be observed in the very earliest stages of incipient tuberculosis. The right recurrent nerve is more liable to be compressed in this case than the left, as the right bronchus is higher than the left and thus closer to the right inferior laryngeal nerve. The left is more liable to suffer from compression by aortic aneurysm as the left nerve encircles the arch of the aorta and is thus liable to be compressed quite extensively. The right inferior laryngeal nerve may be compressed with an aneurysm in the subclavian artery. Enlargement of the thyroid may also compress this nerve, and signs of paralysis in the larynx indicate extension of the goiter into the depths. The same is true of tumors in the esophagus, the posterior crico-arytenoid muscle feeling the effects first but the rapid growth of the carcinoma soon involving the recurrent laryngeal nerve. Another cause of peripheral paralysis of the recurrent nerve is a healed inflammatory process in the right apex of the lungs. Nerve substance may be found embedded in the cicatrix at necropsy; there probably had been recurrent paralysis during life causing moderate hoarseness for which no cause could be discovered. The hoarseness may have subsided and yet the unilateral recurrent paralysis must have persisted throughout life, the sound vocal cord vicariously acting for the paralyzed one. The right inferior laryngeal or recurrent nerve passes close to the right apex of the pleura, and is thus naturally drawn into the retracting cicatricial tissue as the inflammatory process in this region heals. Mitral stenosis is sometimes accompanied by paralysis of the left recurrent nerve. In regard to laryngeal paralysis with brain tumor, he says that unless the medulla oblongata is investigated, the examination cannot be regarded as complete. Among other symptoms in the larynx mentioned is the twitching of the vocal cords liable to be noticed with a tumor in the frontal lobe. Twitching of the vocal cords, Grabower states, is presumptive evidence that the tumor is in the base of the frontal lobe and that it is actively growing.

51. Summarized in THE JOURNAL April 22, 1911, p. 1224.

52. **Improved Method for Artificial Respiration.**—Meyer has modified the Silvester method, drawing the arms upward but pressing them down toward the floor, the body thus assuming the opisthotonous attitude, the head and heels bent backward, the body bowed forward, over the cushion under the shoulders. Another point is that the arms are held with the four fingers above the elbow, on the inside, the thumbs on the outside of the arms. This permits a stronger control of the arms in pushing them toward the floor. This modified technic floods the lungs much more profusely with air.

53. **Flat-Foot and Arthritis.**—Ewald presents evidence to show that the changes of flat-foot leave disturbances such as in all other joints are known as deforming arthritis.

Correspondenz-Blatt für Schweizer Aerzte, Basel

April 1, XLI, No. 10, pp. 337-384

55 Medicolegal Aspect of Induced Abortion. (Mutterschutz und Strafrecht.) A. Goenner.

Deutsche medizinische Wochenschrift, Berlin

April 6, XXXVII, No. 14, pp. 625-672

56 Ulceration in the Intestines. (Diagnose und Behandlung der Darmgeschwüre.) C. A. Ewald.
57 *Operative Treatment of Phlegmon in Stomach Wall. (Ueber Magenwandphlegmone im subakuten Stadium und eine Heilung durch Magenresektion.) F. Koenig.
58 *Subacute Patches of Myelitis with Recurring Endocarditis. H. Lewy and F. H. Lewy.
59 Arsenic Necrosis. L. Geyer.
60 *Kala-Azar in Greece. A. Christomanos.
61 Differential Manometer. (Das logarithmische Differentialmanometer—ein neuer Apparat für physiologische und klinische Druckmessungen.) T. Christen.
62 Permeability of Glass for Ultraviolet Rays. A. Bieber.

57. **Phlegmon in Stomach Wall.**—Koenig's patient was a woman of 28 whose illness had commenced with high fever, headache and vomiting; typhoid had been assumed at first. After subsidence of the acute symptoms pains in the stomach, independent of intake of food, persisted, with oppression and vomiting at times of brownish yellow masses but there was no blood in the stool and no diarrhea and the gastric chemistry was approximately normal. The appetite remained good but the woman grew constantly thinner, losing over 50 pounds in weight; palpation revealed a soft, transverse, long tumor which slid about under the fingers. The trouble proved to be a suppurative inflammation of the stomach wall, a purulent gastritis, which had passed into a subacute stage. The mucosa was perforated in various places, almost like a sieve, while the serosa showed signs of peritonitis and adhesions were forming. It is the first case on record in which the process was inspected at such an early stage and excision of the lesion restored the patient at once to health. The case shows that even after the phlegmon has emptied itself and the pus has been vomited up, yet the lesion does not necessarily heal but may persist in a subacute form, and progressively debilitate the patient. A gastro-enterostomy would not have mended matters, while resection without preliminary opening up of the stomach proved a complete success, the soft tumor-like mass into which the phlegmonous part had been transformed being readily excised.

58. **Myelitis with Recurring Endocarditis.**—Lewy's patient was a woman of 37 with chronically recurring endocarditis and an inflammatory affection of the spinal cord and meninges located at three different points. The affection ran a separate course at each of these points, each being preceded by a recurrence of the endocarditis. During the year and a quarter before the final fatal termination the symptoms had suggested the most various and erroneous diagnoses until microscopic examination cleared up the mystery except in regard to the puzzling behavior of the reflexes. Lewy has not been able to find any similar case on record. The foci in the spinal cord were of a chronic degenerative character in the anterior horns of the sacral segment of the cord, while the process in the upper dorsal segment was a circumscribed meningitis, and the final trouble was an acute disseminated encephalomeningitis.

60. **Kala-Azar in Greece.**—Christomanos recently found the Leishman-Donovan bodies in two hospital patients at Athens, and he thinks that kala-azar is probably prevalent in Greece although it has hitherto been diagnosed as a form of malaria, rebellious to quinin. A certain disease described by Hippocrates as endemic in Greece seems to have been kala-azar, which thus is shown to be not a new importation. No benefit was derived in Christomanos' cases from either atoxyl, arsacetin or salvarsan. Forty-eight hours after an intravenous injection of 0.35 gm. salvarsan the parasites were found still numerous and unmodified in the blood taken from the spleen. Quinin and change of climate gave no relief. The first patient, a girl of 18, has had fever constantly twice a day for nine months; the reactions for syphilis, Malta fever and tuberculosis are negative. The blood shows 1,700,000 reds, hemoglobin 30 per cent. The other patient is a man of 30 and he has had a chill and fever every evening for thirteen months. The spleen is enormously enlarged in both patients and the parasites can be readily detected in blood obtained by puncture of the spleen.

Medizinische Klinik, Berlin

April 9, VII, No. 15, pp. 559-596

63 *General Principles for Treatment of Uterine Myomas. H. Peham.
64 *Formation of Concrements in the Urine and Means to Influence It. (Die steinbildenden Prozesse des Harns und die Wege ihrer Beeinflussung.) H. Schade.
65 *Recurrences in the Nervous System After Salvarsan Treatment of Syphilis. (Zur Neurotropie und Depotwirkung des Salvarsans.) K. Heuser.
66 Potassium or Sodium Bromid? (Bromnatrium oder -kalium?) P. Jödicke.
67 Technic for Intravenous Salvarsan Treatment of Syphilis. (Injektion oder Infusion bei der intravenösen Salvarsanbehandlung?) H. Assmy.
68 *Improved Technic for Saline Infusion. (Kochsalztransfusion.) H. Hellendall.
69 Cataract Operations. (Die moderne Technik der Staroperation.) W. Felichenfeld.
70 Syphilis of the Bronchi. A. Posselt.
71 Etiology of Trachoma. C. H. Sattler.

63. **Uterine Myoma.**—Peham dreads the general anesthesia for a debilitated patient with myoma more than an operation. He comments on the bread-like consistency of myomas and the symptoms liable from pressure and traction on the uterus and on the adjacent organs. There may be no pains but when they exist they may be intensified during menstruation, the hyperemia of the myoma itself adding to the disturbances. Ascites is not unusual as a complication and thrombosis is favored by the pressure. In respect to palliative treatment, he remarks that the cures that have been reported after a course of baths must have been due to an erroneous diagnosis or to the approaching menopause in which the myoma retrogressed. Iodin and its salts promote absorption of inflammatory products and stimulate the circulation so that the general health is favorably influenced. The history of operative treatment of uterine myoma, he says, is one of the most brilliant chapters in gynecology, the mortality having dropped from 36.2 per cent. in 1878 (Gusserow), and 23.1 per cent. in 1891 to 3.8 per cent. in Döderlein's 388 cases of the last six years. Peham's mortality has been 5.4 per cent. in 164 laparotomies and 0.5 per cent. in 180 vaginal hysterectomies for myoma.

64. **Chemical Processes in Urinary Lithiasis.**—Schade's announcements in regard to the share of the colloids, especially fibrin, in the production of concrements in the body are reviewed below in abstract 75. He comments here on the new horizons opened for therapeutics and prophylaxis by means to prevent precipitation of colloids or to dissolve their precipitates when already formed. It is easy to do this *in vitro* and the task now is to discover some substance which will do this harmlessly in the body. He calls the attention of physicians at watering places, in particular, to this task as many of the problems involved can, perhaps, best be studied with mineral waters.

65. **Nervous Disturbances during Salvarsan Treatment of Syphilis.**—Heuser reports a case of papulous iritis a few days after intramuscular injection of 0.2 gm. salvarsan, followed by an intravenous injection of 0.4 gm. salvarsan. Then epileptiform seizures developed. The patient was a painter but there were no signs of lead poisoning; it is possible, however, that the lead might have created a predisposition. In a second case a young workman had paralysis of the vocal cords and soft palate three days after an intravenous injection of 0.5 gm. of salvarsan. No paralysis of this kind had ever before been observed at the clinic in the early stages of syphilis. No improvement was observed under calomel for several weeks but recently slight improvement has become manifest. This patient also presented occasional outbreaks of profuse perspiration during the two months he was in the hospital, suggesting a possible general injury of the nervous system. In a third case, ten weeks after a subcutaneous injection of salvarsan, severe symptoms on the part of the brain developed including choked disc, intense headache and facial paralysis with epileptiform seizures. Heuser is convinced that the cases of cerebral syphilis with these peculiar tonic-clonic spasms are encountered more frequently under salvarsan treatment than corresponds to our previous experience. He tabulates further the findings in regard to the presence of arsenic in the urine after salvarsan treatment; they show that from six to nine months after intramuscular injection arsenic can be detected in the urine (twenty-three cases) and three months after intravenous injection. In one case the arsenic was refound in the blood, also, two months after the intravenous injection. The experiences related apparently confirm, he thinks, Buschke's view in regard to the special affinity of salvarsan for nervous tissue. This neurotropic action of salvarsan is confirmed further, he adds, by Walterhöfer's case of peroneus paralysis, the cases of epileptiform seizures reported by Spiethoff, Gilbert and others, Jorgensen's fatality, and the disturbances in the auditory and optic nerves reported by Stern, Rissom and Bettmann.

68. **Saline Infusion in Emergencies.**—To save time, Hellendall carries in his obstetric bag a concentrated solution of chemically pure salt (8 to 30), so that all that is necessary is to dilute it with boiling water and cool to the desired temperature by standing in a jar of running water.

Monatsschrift für Kinderheilkunde, Leipsic

March, IX, No. 11, pp. 593-632

72 Research on the Colostrum. (Zur Physiologie des neugeborenen Kindes.) W. Berk.
73 Pathology and Therapy of the Secreting Breast. (Die laktierende Mamma.) A. Schiller.

Münchener medizinische Wochenschrift

April 4, LVIII, No. 14, pp. 721-776

74 Present Conception of Diatheses and Dyscrasias. (Die Diathesen und Dyskrasien im Lichte unserer wissenschaftlichen Erkenntnis.) H. E. Hering.
75 *Laws Regulating Formation of Concrements in the Body. (Allgemeine Gesetzmässigkeiten betreffs der steinbildenden Prozesse im Körper. II.) H. Schade.
76 Pancreatitis with Cholelithiasis. (Entstehung der Pankreatitis bei Gallensteinen.) L. Arnsperger.
77 *Hemolytic Test with Cancer. (Ueber Komplementablenkung bei Karzinom.) A. Caan.
78 *Recurrences in the Nervous System After Salvarsan Treatment of Syphilis. (Zur Statistik und Therapie der Neurorezidive unter Salvarsanbehandlung.) J. Benario.
79 Instantaneous Skiagraphs. (Ueber Röntgen-Blitzaufnahmen.) W. Alwens.
80 *The Tourniquet Sign of Scarlet Fever. (Zur Bestätigung des Rumpel-Leedeschen Phänomens bei Scharlach.) H. Bennecke.
81 Juvenile Criminals and Attenuated Responsibility. (Straffällige Jugend und psychopathische Minderwertigkeit.) Ruprecht.
82 Value of Epidural Injections in Treatment of Idiopathic Vulvar Pruritus and Other Sacral Neuroses. G. Schubert.
83 Conflicting Formulas for Albumin Milk in Infant Feeding. (Die Eiweissmilch.) F. Siegert.

75. **Formation of Calculi.**—Schade has continued his research on this subject and states that colloids are involved in the production of stones in the body to a far greater extent than has hitherto been realized. The colloids throw down precipitates which assume the form of strata. Fibrin, for instance, has this power of stratification-precipitation to a marked degree. If it is deposited on an unattached particle, the stratification occurs concentrically. Crystalline substances deposited with it unite to form the concrement; this applies to all calculi formed in the urinary and salivary passages, in the pancreas or in the intestines, prostate or joints and also to the bilirubin-lime stones, but cholesterin stones are formed by the confluence of droplets. The problem of stone formation is brought nearer solution by the discovery of the participation of the colloids, he declares, and the outlook for therapeutics is broadened. It may be possible to alter the medium in such a way that the colloids, especially fibrin, may be prevented from precipitating; if the medium is rendered more alkaline, the colloid remains dissolved and no precipitation occurs. Changes in the electrolytic property may also check the tendency to precipitation of colloids. The benefit from mineral waters in some cases may be explained by their influence on the precipitation of colloids. In his experiments he found that antiformin would dissolve out the colloids, leaving the crystalline elements practically unaffected; the latter dropped to the bottom of the dish as the colloid framework was dissolved by the antiformin, confirming the large share of the colloids in the stone formation. In conclusion he calls attention to the efforts of Nature in this line; in the fresh-water crab (*Astacus fluviatilis*) typical stratification stones form in accessory cavities of the stomach by glandular secretions, the stones being formed of calcium carbonate and phosphate, with organic colloids, the so-called crabstones. They serve a physiologic purpose as a deposit to be drawn on when the crab casts its shell and a new one forms. The stones then drop out into the lumen of the stomach and are rapidly dissolved by the gastric juice and ferments and are absorbed in the intestine. Nature teaches us in this example that it may be possible to influence the pathologic concrements in man in a similar way when the conditions determining the solution and precipitation of the colloid elements in the stones are better studied.

77. **Deviation of Complement with Cancer.**—Caan applied the Wassermann test in eighty-five cases of carcinoma with positive findings in 41 per cent. The reaction was positive in six out of seven cases of carcinoma of the lip, in 67 per cent. of fifteen chancroids and epitheliomas, while positive findings were obtained in only 9 per cent. of the cases of mammary cancer and in 17 per cent. of the thirty-one gastro-intestinal cancers. He applied the deviation of complement test in all its various modifications in each case, with parallel findings.

78. **Recurrence in Nervous System after Administration of Salvarsan in Syphilis.**—Benario sent out a question blank to a number of physicians to collect their experiences in this line. In 126 (147) of the 14,000 cases in which salvarsan has been applied a neuro-recurrence was observed, and he classifies these cases under various headings and compares the findings with the experiences of others with and without salvarsan treatment. The total material confirms, he says, Ehrlich's explanation of these disturbances as manifestations of the syphilis in nerves enclosed in narrow bony canals, not of a drug toxic nature but the work of the few spirochetes left after the destruction of the majority of the spirochetes by the treatment. The striking clinical symptoms are not due to the extent of the process, he says, but to the confined site. Study of the data collected shows that the early secondary stage is peculiarly predisposed to these neuro-recurrences, as also the cases in which the primary sore is extragenital. The malignant character of these extragenital primary lesions, especially those on the head, the *chancres céphaliques*, is well known; the latter being near the central nervous system are peculiarly liable to affect it. Pre-existing headache also should warn against the possibility of neuro-recurrences; there had been intense headache in thirty-six of the sixty cases mentioned in the question blanks in which the headache pointed unmistakably to the injury of the central nervous system by the spirochetes. The conclusion naturally follows that patients with these four predisposing factors should be excluded from salvarsan treatment or its dangers should be fully aired. The data presented further emphasize the advantages of treatment by an intravenous injection of salvarsan, this being followed by a vigorous course of mercury, and this in turn with another intravenous injection of salvarsan. Elderly patients and those debilitated from any cause should be excluded from salvarsan treatment. Benario adds that the attention now paid to manifestations of syphilis in the nervous system will certainly redound to the benefit of patients, as more vigorous treatment will be instituted and the syphilis will be eradicated, thus saving many who might otherwise be candidates for serious irreparable cerebrospinal disease later.

80. **Tourniquet Sign of Scarlet Fever.**—Bennecke confirms the reliability of this sign, described in THE JOURNAL, March 18, 1911, page 859. The absence of the sign seems to exclude scarlet fever, but positive findings are sometimes obtained in other diseases.

Therapeutische Monatshefte, Berlin

April, XXV, No. 4, pp. 209-268

84 *Treatment of Placenta Prævia. R. Birnbaum.
85 *Treatment of Congenital Torticollis. (Der angeborene Schiefhals.) P. Glaessner.
86 *Successful Decompressive Trephining. (Erfolgreiche Trepanationen ohne Befund.) M. Lewandowsky.

84. **Treatment of Placenta Prævia.**—Birnbaum describes the treatment he advocates for the general practitioner, emphasizing that treatment must be begun the moment the diagnosis is made. He insists on shaving the parts and on the use of ten or twenty moist cotton wads for tamponing the vagina, instead of gauze, although the latter is better for the uterus itself. His experience with the Momburg belt constriction has been unfavorable, as he had severe collapse in two cases, and one patient died; for this death he regards the constriction as responsible. Great caution is necessary in moving the woman on account of the danger of air embolism and thrombosis. Massage of the legs is necessary from the first day after delivery unless symptoms indicate that thrombosis is already installed.

85. **Congenital Torticollis.**—Glaessner severs the muscles subcutaneously in the very mild cases in young children but otherwise exposes the sternocleidomastoid muscle and resects the fibers for a stretch of 1 or 1.5 cm., afterward applying a plaster cast in over-correction.

86. **Successful Trephining without Findings.**—Lewandowsky reports two cases in which the patients were restored to health by decompressive trephining although nothing was found when the skull was opened to explain the symptoms that had been

observed. The first patient was a woman of 36 who developed intense headache and symptoms indicating disease of the left hemisphere after a slight trauma—striking the left side of her head against the edge of an open door. By the end of a month she had seizures suggesting epilepsy, with right paralysis, total aphasia and stupor. Conditions were found apparently normal on trephining but there must have been a high tension in the brain as there was prolapse of brain tissue, but the patient improved remarkably by the next day. She still has traces of paraphasia but otherwise has been well during the four years since. In the other case, intense headache and tenderness in the region of the temple persisted for six months after the young man had been kicked in the side of the head by a horse, after which he had been unconscious for four days. The trephining showed apparently normal conditions with no sign of abnormal pressure or inflammation, but the headache never returned after the operation and the patient has been in perfect health during a year since. The strict localization of the headache, its tenacity and the lack of neurasthenic or hysteric symptoms and the complete recovery after the operation suggest that the trouble must have been some traction on the dura from a possibly slight fracture of the skull.

Therapie der Gegenwart, Berlin

April, LII, No. 4, pp. 145-192

87 *Epidemic Poliomyelitis. (Akute epidemische Kinderlähmung.) P. Krause.
88 *Radiotherapy of Internal Disease. (Der gegenwärtige Stand und die nächsten Ziele der Röntgen-Therapie bei Erkrankungen innerer Organe.) H. E. Schmidt.

87. **Epidemic Poliomyelitis.**—Krause has compiled a number of tables showing the geographical and chronological prevalence of this disease. Other tables show the development of the disease by groups compiled from the replies to the question blanks he sent out to physicians in the German provinces along the Rhine. The transmission of the disease by healthy carriers is further demonstrated by the material tabulated. A grandmother in one instance carried the disease from one grandchild to another who lived at some distance. Another table shows the ages of the patients in his compiled material. The majority were 2 years old (165); 101 were 3 years old, ninety-seven between 4 and 7, thirty between 8 and 10, three between 20 and 30, and two between 30 and 40, with eleven less than a year old. In Germany the months of August, September and October contained nearly all the cases. The mortality in all the epidemics tabulated was the lowest (5 per cent.) in the New York epidemic; it was 16.7 per cent. in Sweden; 14.56 per cent. in Norway, and 22.3 in Austria. The article is to be continued.

88. **Radiotherapy of Internal Organs.**—Schmidt refers in particular to the treatment of deep cancer and states that better results may be anticipated when we learn how to sensitize the deep-lying tissues. This is accomplished for superficial tissues by means to stimulate the metabolism, for which active hyperemia is the most effectual known to date. If we can learn how to induce local hyperemia in the deep cancers, the Roentgen rays reaching them will have their action immeasurably enhanced. He thinks that it may be possible to discover some serum or drug, which, like tuberculin, will have an elective action on the tumor tissue inducing a local reaction and thus sensitizing it for the Roentgen rays. At present the only way that this can be accomplished is by thermopenetration, that is, applying the high-frequency current, which permits the tissues below to be raised to any desired temperature while sparing the skin. He reports the details of a case of epithelioma of the nose which subsided under radiotherapy after two years but returned four years later. The patient refused operation and the ulcerating epithelioma subsided anew under the Roentgen rays applied the day after the mercury-vapor lamp had been used to induce a local erythema. Only four applications of the mercury light plus Roentgen-ray exposures were required before the lesion had entirely healed over. There has been no sign of recurrence during the three months since. The mercury light was applied again a few times to enhance the resisting power of the cicatrix. The task now before Roentgenologists is to improve the technic for inducing hyperemia in the depths to enhance the sensitiveness to the Roentgen rays, as we know that expelling the blood from a superficial lesion reduces its sensitiveness to the rays.

Wiener klinische Wochenschrift, Vienna

April 6, XXIV, No. 14, pp. 479-518

89 Pigmentation of the Skin. (Zur Kenntnis der menschlichen Hautpigmentierung.) Y. Tanaka.
90 The Lipoid of the Suprarenal Cortex. (Das Lipoid der Nebennierenrinde.) H. Albrecht and O. Weltmann.
91 *Psychic Etiology and Treatment of Arteriosclerosis. M. Herz.
92 *Paroxysmal Hemoglobinuria. A. Krokiewicz.
93 Oculomotor Paralysis in an Infant. A. Purtscher.

91. **Arteriosclerosis and the Strenuous Life.**—Herz regards the subject of arteriosclerosis as one of the most vital of all for the medical profession not only on account of their patients but because physicians, themselves, are particularly prone to acquire arteriosclerosis or at least to imagine that they are acquiring it. He says that fully 300 out of the 3,000 physicians in Vienna have consulted him on account of arteriosclerosis, and although the fears of many were groundless, yet an unusually large proportion actually show signs of arteriosclerosis. For this he is inclined to incriminate the peculiarly strenuous life of physicians, their cares and worries, the constant strain on their sympathies, the harassing feeling that perhaps if they had treated some patient along other lines he might have done better. Herz comments on the fact that life has become so much more strenuous during the last decades. All feel that they must work under high pressure and provide for the future instead of enjoying life as they go along and providing only for the immediate present. He says that life has become Americanized, and that arteriosclerosis is becoming more frequent in consequence although it is more of a chronic cardiac and cardiorenal type rather than the angina pectoris type of former decades. Treatment and prophylaxis should aim to banish worry and gloom and promote cheer. Instead of impressing on the young constantly their duties and responsibilities to others and the state, they should be taught that they have a duty to themselves, to seek cheer and joy to alternate with work. Physicians must train their patients to look on the bright side of things and stop worrying, for there is not the least doubt, he reiterates, that every persisting worry or carking care is distinctly dangerous for the heart and kidneys, and physicians must strive to cultivate cheeriness. Herz applies to the medical profession Goethe's remark in regard to German literary men, namely, that the members of the medical profession are like billiard balls; each is intent only on going its own way, and if two come into contact they bound apart and go their separate ways with even greater energy and haste.

92. **Paroxysmal Hemoglobinuria.**—Krokiewicz reports a case of this kind in a man of 48, previously healthy. The paroxysmal hemoglobinuria was first observed seven years ago and since then he has had the attacks whenever he has been much chilled; great fatigue and excitement do not bring on the attacks unless accompanied by chilling. Sometimes the hemoglobinuria occurs without other symptoms but generally there is a sense of exhaustion, pains in the muscles, restlessness and headache, then in twenty minutes a chill and fever and after half an hour the urine is as red as Burgundy wine; it clears up again in the course of from two to five hours. While under observation the hemoglobinuria could be brought on like a laboratory experiment by having the patient hold his feet in cold water for a little while. A tourniquet applied to the thighs never brought it on, and the attack could be arrested by applying heat (water bottles to the legs). The attacks could be brought on at intervals as brief as twenty-four hours. Hemolysins were found in the blood and their presence in the blood accumulating in the viscera in consequence of the exposure to cold, with the local accumulation there likewise of carbon dioxid in the blood, produce conditions similar to those of Hymans' test-tube experiments. Hemolysis follows and the hemoglobinuria results; the whole process can be broken up by putting an end to the action of cold by warming the legs. The Wassermann reaction was positive in this patient which possibly throws light on the unusual lack of resistance to carbon dioxid on the part of the red corpuscles.

Zeitschrift für Kinderheilkunde, Berlin

I, Nos. 5-6, pp. 423-572. Last indexed March 4, p. 706

94 The Work of T. Escherich. C. v. Pirquet.
95 *Histologic Structure and Bacillary Etiology of Papulous Tuberculides in Infants. M. Lateiner.
96 Research on the Parathyroids, with Special Regard to Tetany and Sudden Death of Infants. (Epithelkörperchen-Untersuchungen.) P. Grosser and R. Betke.
97 Chemical Study of Infants' Urine. (Chemische Teilerscheinungen im Harne gesunder und kranker Säuglinge.) E. Mayerhofer.
98 *Summer Heat and Temperature of the Home in Relation to Infant Mortality. (Sommerhitze, Wohnungstemperatur und Säuglingssterblichkeit.) H. Rietschel.

95. Diagnostic Importance of Tuberculides in Infants.—Lateiner regards the papulous or papulo-squamous tuberculides of infants as of blood-borne origin, and of diagnostic importance even when the tuberculide appears isolated. The Hamburger type is smaller, more superficial and free from a tendency to ulceration. Acid-fast bacilli can be regularly discovered in the papulous form in the various stages of its development, and the bacilli are capable of inducing fatal typical tuberculosis in guinea-pigs. In the ten infants with these tuberculides whose histories are reported, the cutaneous tuberculin reaction was the only other sign of tuberculosis in three; in six there was miliary tuberculosis. These tuberculides are encountered only in infants with tuberculosis of internal organs, and as they are so small and cause no disturbances they are often overlooked. They vary from a pin-head to the size of a hemp seed; they project very little; there is no encircling zone of inflammatory redness and no infiltration around. They are light red at first, then a livid brown, with a scab in the center, and when this is scratched off a shallow depression is left which does not bleed or weep. Some of the tuberculides may be very flat, without a scab, merely a dimple in the center. Lateiner found also, occasionally, small circular, slightly depressed scars of a livid brown color. From one to four tubercle bacilli were found in each tuberculide, and guinea-pigs inoculated promptly developed typical tuberculosis. A single tuberculide of this kind on the upper arm was the only manifestation of the tuberculosis in one case. In another there was one on the dorsum of one foot and three on the sole of the other, with signs of tuberculous meningitis. Other infants had one on the knee and one on the foot; another, several on feet and fingers; one a pin-head tuberculide on the elbow; another, several on leg and forearm, and still larger numbers on some of the others. In one of the infants the first two nodules subsided and four others developed elsewhere.

98. Summer Heat and Infant Mortality.—Rietschel has been examining conditions in the homes of the poor in Dresden in regard to the actual temperature of the rooms during the summer. Maximal thermometers or thermographs were installed and the findings recorded in daily visits by his aids. The research was limited to the tenements or houses in which more than one infant had died in the last five years. The summer was an unusually cold one, but the thermometers registered for weeks at a time in the rooms where the infants lived over 25 C. (77 F.) and in some days up to 35 and 37 C. (95 and 98.6 F.) with an outdoor temperature of 23.5 and 21.3 C. (74.30 and 70.34 F.). The heat in the living room is thus shown to be intense in the homes of the poor and this keeps up for weeks and months and is, he is convinced, the direct decisive factor in infant mortality during the heated term.

Zentralblatt für Chirurgie, Leipsic

April 8, XXXVIII, No. 14, pp. 489-528

99 Operation for Hare-Lip. (Zur Technik der Operation der Hasenscharte.) K. Vogel.
100 *Cholangiocystostomy. J. E. Lohse.

100. Cholangiocystostomy.—Lohse commends the palliative operation he performed in a case of severe cholemia from cancer of the common bile duct. The patient was thus tided past the dangerous period of cholemia and survived in comfort for nearly three months afterward. A long forceps was passed into the gall-bladder and through it into the adherent liver until the tip could be felt through the convex margin of the liver. A thick drain was inserted into the passage thus formed and the wound sutured around it. Only a little bile escaped the first day but the amount increased to 200 c.c. by the third and by the end of two weeks the jaundice had disappeared.

Zentralblatt für Gynäkologie, Leipsic

April 8, XXXV, No. 14, pp. 537-568

101 Etiology of Placenta Prævia. R. Meyer.
102 *Improved Technic for Tubal Sterilization. A. Labhardt.
103 Technic for Auscultation of Fetal Heart Sounds. (Neues Verfahren zur Auskultation der fötalen Herztöne und über die Zeit, in der sie zuerst gehört werden können.) R. Todyo.

102. Tubal Sterilization.—Labhardt describes a method of subserous resection of the tubes in common use at von Herff's maternity at Basel. Sterilization is regarded as a matter of course in cases of severe prolapse of the uterus in multiparæ over 40. He has applied the Asch method in thirty cases without a failure, but during the last two years he has avoided the disadvantages of this technic by drawing out the proximal tube for 2 cm. beyond its peritoneal mantle. The stump is then cut off and what is left withdraws into the depth of the empty mantle of the peritoneum which is then sutured and soon grows together, shutting off the stump of the tube entirely. This technic can be applied by the vaginal or abdominal route, and has several advantages, he declares, over other methods in vogue.

Zentralblatt für innere Medizin, Leipsic

April 8, XXXII, No. 14, pp. 345-368

104 Roentgen-Ray Diagnosis of Pregnancy. (Diagnose der Schwangerschaft mittels des Röntgenverfahrens.) R. v. Jaksch.

Gazzetta degli Ospedali e delle Cliniche, Milan

March 28, XXXII, No. 38, pp. 403-410

105 Diaphragmatic Pleurisy and Peritoneal Syndrome. G. Baglioni.

April 2, No. 40, pp. 419-434

106 Experimental Research on Castration and Parathyroidectomy. A. Massaglia.

April 4, No. 41, pp. 435-442

107 Chorea in Malaria. (Corea ed infezione palustre.) V. Fusco.

Policlinico, Rome

March 26, XVIII, No. 13, pp. 389-420

108 *Acute Infections of Unknown Origin. G. Baccelli.

April 2, No. 14, pp. 421-452

109 Eosinophil Cells in Sputum in Asthma. M. Pennetta.

108. Acute Infections of Unknown Origin.—Baccelli refers in particular to what Leube calls cryptogenetic infections but which he designates as infections of latent origin. He claims that the conception of toxemia resulting from bacterial invasion originated in the Rome clinic before the discovery of the tubercle bacillus. The infectious germs may be classed, he says, as those inducing fever, those inducing inflammation, neurospastic conditions, neuroparalytic conditions and abnormal conditions in the blood, or combinations of these types. Differentiation of the cause of the infectious process is frequently impossible; sometimes it invades the blood first and the tissues later, sometimes the germs localize first in the tissues and pass later into the blood, possibly intermittently. The specific reaction can never be regarded as absolute, he continues; it is merely one important symptom to be estimated in connection with others. From these and other arguments cited he concludes that the aim should be to stimulate the production and the functioning of the phagocytes in all these infections of unknown origin at least; by this means the toxic substances in the blood are rapidly neutralized, and the supreme means to accomplish this is by intravenous injection of mercury bichlorid. His formula is 0.01 gm. mercury bichlorid, 0.075 gm. sodium chlorid and 10 gm. water. This injection can be repeated two or three times in twenty-four hours in the severest cases. Immediately after the injection the temperature drops, the synthetic reaction on the part of the organism to the infectious cause reduces the intensity of the infection, and he reports a number of instances to show the benefit that follows this measure. In one case of acute infectious disease, which no one was able to explain, a turn for the better followed the mercurial intravenous injection and the patient was soon restored to health. Baccelli has collected a number of similar testimonials to the life-saving efficacy of the measure and has accumulated an imposing array of testimony during the twenty years or more since he has been advocating this heroic intravenous medication.

Riforma Medica, Naples

April 3, XXVII, No. 14, pp. 365-392

110 *Echinococcus Disease of the Spleen. (Caso di echinococco della milza.) D. Biondi.
111 Spinal Anesthesia Plus Scopolamin-Morphin. (La rachistovainizzazione combinata con "sonno incerto.") G. Bazzocchi. Commenced in No. 13.

110. **Echinococcus Disease of the Spleen.**—Biondi's patient was a country woman of 42, previously healthy. A tumor was noticed in the left hypochondrium after a childbirth, but no symptoms were felt for seven years, then high fever and intense pain in the epigastrium, radiating to the back and hypochondrium, developed, with obstinate constipation. The fever dropped by a crisis and the pain in the epigastrium subsided but that in the left hypochondrium persisted, and there was pronounced eosinophilia with slight albuminuria. The operation revealed non-suppurating, multilocular hydatid cysts in the spleen, which was adherent to the diaphragm, colon and to the wall of the vena cava, but the splenectomy was finally completed.

Norsk Magazin for Lægevidenskaben, Christiania

April, LXXII, No. 4, pp. 417-528

112 Traumatic Pulsating Exophthalmos Cured by Orbital Operation. H. Lystad.
113 Dextrocardia. H. F. Høst.
114 Necropsy in Case of Cystic Kidney Over a Year After Nephrectomy. (Videre meddelelser om et tilfælde av cystenyre. P. Bull.
115 Roentgen-Ray Diagnosis of Tuberculosis of Lungs and Bronchial Glands. S. A. Heyerdahl.
116 Rectoscopy and Sigmoidoscopy. (Rekto-romanoskopi.) N. B. Koppang.

Ugeskrift for Læger, Copenhagen

March 30, LXXIII, No. 13, pp. 443-476

117 Vibratory Massage in Treatment of Chronic Pharyngitis. G. Fanøe.
118 *Medical Organization. (Lægekunsten og Lægen i Nutiden.) V. Scheel.

April 6, No. 14, pp. 477-510

119 "Tuberculin Titer" Test in Tuberculosis. (Tuberkulintiterbestemmelser hos Ftisikere.) K. Lundh.
120 *Relief of Disturbances in Swallowing by Compression of the Ear Region. (En simpel Metode til Bekæmpelse af visse Former af Synkesmerter.) P. T. Hald.

118. **Outlook of the Medical Profession.**—Scheel discusses the prevailing tendencies in regard to medicine and the medical profession and the importance of organization, commenting on the remarkably small part taken in public affairs by physicians as a rule. This, he declares, is the more striking as logically medical men should be the leaders in the movements to improve the public welfare. He ascribes this to the fact that physicians by the nature of their work are inclined to be individualists, but he warns that this tendency should be combated.

120. **Relief of Disturbances in Swallowing by Compression of the Ear Region.**—Hald's experience has confirmed the assertions of Milligan and Horne in regard to the relief of pain in the throat by strong pressure applied to the tragus or mastoid process. In thirty-two cases he was able to relieve or banish completely the pains in swallowing with inflammatory affections in the tonsils or vicinity while in fourteen other cases no benefit was apparent. He uses for the compression a light adjustable frame with two pads to press on the tragus or mastoid process on each side. He explains the effect as due to the counter-irritation on the skin at a point where the sensory nerves are closely connected (centrally) with the sensory nerve supply of the tonsils.

Upsala Läkareförenings Förhandlingar, Upsala

N. S. XVI, Nos. 4 and 5, pp. 231-348. Last indexed Feb. 4, p. 390

121 Infantilism. A. Josefson. Continued.
122 *Salvarsan in Syphilis of the Nervous System. H. Marcus.
123 Determination of Tubercle Bacilli in the Sputum. (Jämförande undersökning öfver de nyare metoderna för påvisande af tuberkelbaciller i upphostningar.) J. Heyman.
124 Experimental Research on Behavior of the Thymus After Castration or Roentgen-Ray Exposures of Ovaries or Testicles. (Thymus efter exstirpation, resp. röntgenbestrålning af könskörtlarne.) O. Gellin.

122. **Salvarsan in Syphilis of the Nervous System.**—Marcus gives the details of a dozen cases out of a total of fifty cases of syphilis of the nervous system in which he administered salvarsan. Although the remedy is powerless against severe advanced paralysis or tabes dorsalis, yet the bladder and bowel disturbances and the pains were much ameliorated and improvement was apparent in other directions; in some patients the memory improved, others lost their apathy and difficulty in speaking. Five of the patients have died since the injection, one, eight days afterward from hemorrhage in the pons; one a month later from an accidental fall; one from recurring cerebral hemorrhage, and two from the progressive course of a glioma in the brain or of chronic pyelonephritis and cystitis with diarrhea. He states that there did not seem to be any connection between the medication and the death in any instance. But the severe diarrhea in the last mentioned case is not absolutely free from suspicion in this line, although he has never seen any mention in the literature of diarrhea following administration of salvarsan.

Books Received

Books received are acknowledged in this column and such acknowledgment must be regarded as a sufficient return for the courtesy of the sender. Selections will be made for review in the interests of our readers and as space permits.

PRACTICAL CYSTOSCOPY AND THE DIAGNOSIS OF SURGICAL DISEASES OF THE KIDNEYS AND URINARY BLADDER. By Paul M. Pilcher, A.M., M.D., Consulting Surgeon to the Eastern Long Island Hospital. Cloth. Price, $5.50 net. Pp. 398, with 233 illustrations. Philadelphia: W. B. Saunders Co., 1911.

YELLOW FEVER. A Compilation of Various Publications. Results of the Work of Maj. Walter Reed, Medical Corps, United States Army, and the Yellow Fever Commission. Sixty-first Congress, Third Session. Document No. 822. Paper. Pp. 250. Washington: Government Printing Office, 1911.

MODERN SURGICAL TECHNIC IN ITS RELATION TO OPERATIONS AND WOUND-TREATMENT. By C. Yelverton Pearson, M.D., M.Ch., F.R.C.S., Professor of Surgery, University College, Cork. Second Edition. Cloth. Price, $4 net. Pp. 484, with 129 illustrations. New York: William Wood & Co., 1911.

A WORKING MANUAL OF HIGH-FREQUENCY CURRENTS. By Noble M. Eberhart, A.M., M.S., M.D., Professor and Head of the Department of Electrotherapy, Chicago College of Medicine and Surgery. Cloth. Price, $2. Pp. 303, with 63 illustrations. Chicago: New Medicine Publishing Co.

PLASTER OF PARIS AND HOW TO USE IT. By Martin W. Ware, M.D., New York, Adjunct Attending Surgeon, Mount Sinai Hospital. Second Edition. Cloth. Price, $1.25. Pp. 101, with 90 illustrations. New York: Surgery Publishing Co., 92 William Street, 1911.

AN INTRODUCTION TO DERMATOLOGY. By Norman Walker, M.D., F.R.C.P., Physician for Diseases of the Skin, The Royal Infirmary, Edinburgh. Fifth Edition. Cloth. Price, $4 net. Pp. 346, with 142 illustrations. New York: William Wood & Co., 1911.

TRANSACTIONS OF THE AMERICAN HOSPITAL ASSOCIATION. Twelfth Annual Conference Held at St. Louis, Mo., Sept. 20-23, 1910. Volume XII. Paper. Pp. 413. Published by the Association Office of Secretary, Toronto, Canada, 1911.

FOOD AND THE PRINCIPLES OF DIETETICS. By Robert Hutchison, M.D., Edinburgh, F.R.C.P., Physician to the London Hospital. Third Edition. Cloth. Price, $3 net. Pp. 615, with illustrations. New York: William Wood & Co., 1911.

THE NATURE OF ENZYME ACTION. By W. M. Bayliss, D.Sc., F.R.S., Assistant Professor of Physiology, University College, London. Second Edition. Cloth. Price, $1.20 net. Pp. 137. New York: Longmans, Green & Co., 1911.

DIE HERNIEN UND IHRE BEHANDLUNG. Von O. Borchgrevink, Oberarzt des Diakonenhospitals in Christiania. Paper. Price, 5 marks. Pp. 311, with 40 illustrations. Jena: Gustav Fischer, 1911.

THE FATS. By J. B. Leathes, M.A., M.B., F.R.C.S., Professor of Pathologic Chemistry in the University of Toronto. Cloth. Price, $1.25 net. Pp. 138. New York: Longmans, Green & Co., 1910.

THIRTY-SEVENTH ANNUAL REPORT OF THE MEDICAL DIRECTOR OF THE CINCINNATI SANITARIUM. For the Year Ending Nov. 30, 1910. H. P. Collins, Secretary. Paper. Pp. 18, with illustrations.

ANNUAL REPORT OF THE MERCY HOSPITAL (FORMERLY CITY HOSPITAL), BALTIMORE, MD. For the Year Ending Dec. 31, 1910. Paper. Pp. 72. A. C. Gillis, Medical Superintendent.

FIFTEENTH ANNUAL REPORT OF THE STATE MEDICAL BOARD, STATE OF OHIO. For the Year Ending Dec. 31, 1910. Paper. Pp. 67. George H. Matson, Secretary. 1910.

REPORT OF THE COMMISSIONER OF EDUCATION. For the Year Ended June 30, 1910. Volume II. Cloth. Pp. 1373. Washington: Government Printing Office, 1911.

NINETEENTH ANNUAL REPORT OF THE BOARD OF HEALTH, CITY OF SPOKANE, WASH. For the Fiscal Year Ending Dec. 31, 1910. Paper. M. B. Grieve, Secretary.

THE CHEMISTRY OF SYNTHETIC DRUGS. By Percy May, B.Sc. (London). Cloth. Price, $2.25 net. Pp. 229. New York: Longmans, Green & Co., 1911.

THE JOHN CREAR LIBRARY: SIXTEENTH ANNUAL REPORT FOR THE YEAR 1910. Paper. Pp. 66. Leonard A. Busby, Secretary. Chicago, 1911.